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COMMUNICATIONS AND ROLE SATISFACTION

IN POST-SECONDARY INSTITUTIONS

by



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A THESIS

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ABSTRACT

The basic purpose of the study was to determine the relationship, if any, between the satisfaction with role and the satisfaction with communications felt by presidents, staff members, and students in post-secondary institutions in Alberta. Six post-secondary institutions were selected for the study; the group included two junior colleges, two agricultural-vocational colleges, and two institutes of technology.

The main hypotheses suggested that satisfaction with role was significantly and positively related to overall satisfaction with communications. Each correlation was found to be positive and significant.

Related hypotheses examined the degree to which satisfaction with role correlated with satisfaction with communications among certain groups. Significant and positive correlations were found between the role satisfaction of the president and his satisfaction with communications with groups within and outside the college. Significant correlations were found between staff role satisfaction and staff satisfaction with communications with groups within the college. Student role satisfaction was significantly correlated only with satisfaction with communications with other students.

The Questionnaires were administered to five presidents, fifty staff members, and eighty-two students. These participants also

completed an average of sixteen Communication Record Forms each.

The Questionnaires were designed to measure role satisfaction and the Communication Record Forms were designed to assess satisfaction with communications as well as to determine communication patterns and preferences.

Factor analyses of the Questionnaires identified certain factors of role satisfaction. The scores on these factors were correlated with communication satisfaction scores for presidents, staff members and students. Significant and positive correlations were found between the factor concerning coworkers and communication satisfaction.

Analyses of the Communication Record Form indicated that preferred and most frequent communications were oral, informal, and self-initiated by all groups of presidents, staff members and students.

The findings of this research support the contention that communication satisfaction is an important dimension in role satisfaction.

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CHAPTER I

DISCUSSION OF THE PROBLEM

Communication among individuals and groups is basic to all the cultures of the world. The development of cooperative societies is a direct result of the transmission and reception of ideas among men. From Man's earliest vague utterances to his present complex electronic systems, societal advancement has been largely regulated by his ability to exchange information. Oral and gestural face-to-face communication systems were found to be insufficient vehicles for the dissemination of information to large numbers of people. Pictorial depictions, the printing press, telephone systems, and radio and television networks evolved as mass and long-distance communications media.

Man, as an intelligent social being, has a need to understand others in his society and a need to communicate his own thoughts to others. Generally, he is dependent upon accepted communication systems to feel that he is a part of society. If communication transmission or reception is disturbed, interrupted, or otherwise unsatisfactory, the individual may feel a sense of isolation from his society. Conversely, satisfactory communication may lead the individual to experience a greater sense of identity with his society. Satisfaction with communications may affect the individual's sense of belonging to society, and his personal satisfaction with his role in society as an accepted, contributing, and respected member, with an influence on the very

structure of society.

The inseparability and interdependence of the communications, the structure, and the roles within a social system have been pointed out by various researchers; Herzberg, Mausner and Snyderman stated:

... a group can be viewed as having structure or form. This structure is dependent upon the nature of communication among its members and also on the lines of influence.¹

Thayer supports their view:

Communication may be conceived of as the dynamic process underlying the existence, growth, change, the behavior of all living systems -- individual or organization.²

Biddle, in the report of a study on group dynamics, stated:

... a social system may be thought of as involving two subsystems, those of role expectations and communication.³

An educational institution, such as a junior college, is a social organization with its own communication systems among the individuals within its boundaries and with its relevant environment. Barriers to satisfactory communications in the junior college may adversely affect the educational effectiveness of the college, the morale, the climate and the general satisfaction with role of those within the college.

¹F. Herzberg, B. Mausner and B. Snyderman, The Motivation to Work. New York: John Wiley, 1959, p. 9.

²L. Thayer, Communication and Communication Systems. Homewood, Illinois: Irwin, 1968, p. 17.

³B. Biddle and E. Thomas (eds.), Role Theory: Concepts and Research. New York: John Wiley, 1966, p. 150.

This study examined the relationship between the satisfaction felt with communications and the satisfaction felt with their roles in the post-secondary institution, by the presidents, the staff, and the students.

I. THE PROBLEM

An individual may have a variety of perceived reasons for satisfaction or dissatisfaction with his occupation and factors that are integral parts of that occupation such as (a) content of work, (b) direct supervision, (c) organization and management, (d) opportunities for advancement, (e) wages and other benefits, (f) coworkers and peers, (g) conditions of work, and (h) communications. This study was primarily concerned with the relationship between occupational satisfaction and communication satisfaction.

Statement of the Problem

The problem that is basic to the study may be expressed as a question: to what extent is there a relationship between role satisfaction and communication satisfaction as experienced by the presidents, the staff, and the students in post-secondary institutions in Alberta?

Related sub-problems. The major sub-problems of the study may also be expressed as questions:

1. To what extent is there a relationship between the role satisfaction of the president of the post-secondary institution and his satisfaction with communications with (a) the staff,

(b) the students, and (c) the community?

2. To what extent is there a relationship between the role satisfaction of the staff of the post-secondary institution and satisfaction with communications with (a) other staff members, (b) the president, (c) the students, and (d) the community?

3. To what extent is there a relationship between the role satisfaction of the students of the post-secondary institution and their satisfaction with communications with (a) other students, (b) the staff, (c) the president, and (d) the community?

II. HYPOTHESES

The hypotheses that were tested in the study derived directly from the stated problems.

Hypothesis One

Role satisfaction of presidents, staff, and students in the post-secondary institutions, as measured by the Role Satisfaction Form (Questionnaire), is positively correlated with satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

Hypothesis Two

Role satisfaction of the president of the post-secondary institution, as measured by the Role Satisfaction Form (President Questionnaire), is positively correlated with his satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

Hypothesis Three

Role satisfaction of the staff of the post-secondary institution, as measured by the Role Satisfaction Form (Staff Questionnaire), is positively correlated with the satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

Hypothesis Four

Role satisfaction of the students of the post-secondary institution, as measured by the Role Satisfaction Form (Student Questionnaire), is positively correlated with the satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

Related Hypotheses

The foregoing were the four main hypotheses of the study. However, it was anticipated that communications between certain groups and the satisfaction felt with those communications would correlate positively with role satisfaction. The following groups were used in the testing of the related hypotheses:

1. President and Staff
2. President and Students
3. President and Community
4. Staff and Staff
5. Staff and Students
6. Staff and President
7. Staff and Community
8. Students and Students

9. Students and Staff
10. Students and President
11. Students and Community

Importance of the Study

Many studies have been conducted in the examination of communications systems. Other studies have explored areas that cause job satisfaction, such as organizational climate, staff morale, and leader behavior. Factors that cause job satisfaction or dissatisfaction are unquestionably worthy of research, since such analyses may result in recommendations for more effective administrative practices in order to achieve higher productivity or greater internalization of organizational goals. Very little research has been conducted into the question of intra-organizational communication satisfaction and its relationship to role satisfaction. Since communication is such a necessary part of the functioning of any social system, the present study is important in attempting to establish the existence of the communication/role satisfaction relationship.

III. ORGANIZATION OF THE THESIS

The first chapter has outlined the nature of the problem, basic and related hypotheses, and the importance of the study.

Chapter II contains a discussion of the theoretical framework of the study which is based on role theory and communication theory. Chapter III is concerned with the research design followed by the analysis of the data in Chapter IV.

Chapter V, the final chapter, is devoted to a summary, conclusions, and implications based upon the study.

IV. REFERENCES FOR CHAPTER I

- Biddle, B., and E. Thomas, (eds.) Role Theory: Concepts and Research.
New York: John Wiley, 1966.
- Herzberg, F., B. Mausner and B. Snyderman, The Motivation to Work.
New York: John Wiley, 1959.
- Thayer, L., Communication and Communication Systems. Homewood,
Illinois: Irwin, 1968.

CHAPTER II

THEORETICAL FRAMEWORK

I. ROLE THEORY

Role theory attempts to conceptualize human conduct at a complex level. It is an interdisciplinary theory in that its variables are drawn from studies of culture (anthropology), society (sociology), and personality (psychology). Sarbin stated:

The broad conceptual units of the theory are 'role', the unit of culture; 'position', the unit of society; and 'self', the unit of personality.¹

Role theory has been used as a basis for research in many different fields, especially those concerned with social systems and educational organizations. Gross, Mason, and McEachern reported a series of studies from Harvard on role and expectations. Their stated goal was to "forge a closer link between theoretical and empirical analyses concerned with the study of roles."²

Chase reported a number of role studies in education and concluded that:

¹T. Sarbin, "Role Theory" in Handbook of Social Psychology, G. Lindzey (ed.), Cambridge: Addison-Wesley, 1954, p. 223.

²N. Gross, W. Mason, and A. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role. New York: John Wiley, 1958, p. 3.

The administrator needs accurate information regarding the teacher's expectations as to what functions should be carried out by the school, who should carry out the particular functions, and how the person or persons should perform these functions.³

Chase's argument need not be restricted to administrators: the administrators, the students, and the teachers are more likely to achieve the aims of the institution if agreement can be reached on role expectations. Reeves, Melsness and Cheal support this view although they have the teacher in mind primarily when they write:

... the administrator alone cannot define a role. Neither can he define activities without reference to those concerned. However, he can hold expectations for each role... The school board, the superintendent, the parents, and the pupils all have expectations of the teacher... these taken together will constitute the role the teacher is expected to fulfil.⁴

The experienced administrator considers the various expectations held by different groups when outlining the general plan of activities that he anticipates may lead to the achievement of the goals of the institution. However, the complexities of the factors that influence the role behavior of each incumbent may cause "reconsideration and readjustment of institutional goals."⁵ Reeves et al. mention seven factors that they consider should be taken into account by the administrator when assessing his staff and the institution he administers:

³F. Chase, "How to Meet Teachers' Expectations of Leadership," Administrators' Notebook. I, 9, (April 1954), p. 1.

⁴A. Reeves, H. Melsness, and J. Cheal, Educational Administration: The Role of the Teacher. Toronto: MacMillan, 1962, p. 23.

⁵A. Reeves, et al., op. cit., p. 24.

- (a) the way in which the person himself defines his role,
- (b) the way in which he believes others define his role,
- (c) his personality,
- (d) his competencies,
- (e) situational factors and physical limitations,
- (f) his incentives and rewards,
- and (g) his age and physical condition.

Getzels and Guba developed a conceptual model for the analysis of social systems. They suggested two dimensions which must be considered: (a) the nomothetic dimension which concerns the roles and expectations that will fulfil the goals of the institution; and (b) the ideographic dimension which concerns the personalities and need-dispositions of the individuals within the system.⁶ The Getzels and Guba model has been useful to researchers of social systems. It may be represented diagrammatically:

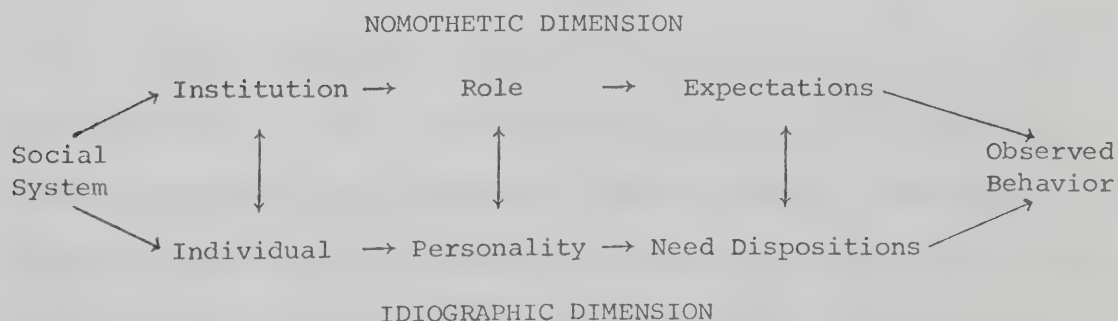


Figure 1. Getzels and Guba Social System Model⁷

⁶J. Getzels and E. Guba, "Social Behavior and the Administrative Process," The School Review, LXVII, Winter 1957, pp. 423-41.

⁷J. Getzels and E. Guba, op. cit., p. 429.

Getzels and Guba postulated that the behavior of individuals within the system is a function of the role and personality dimensions, that is, the nomothetic and idiographic dimensions. The social system expresses the culture patterns of the community and represents the consensus of opinion on the part of society's members as to how people should behave in particular situations. Evidently, this will vary considerably from individual to individual and from situation to situation.

An educational system is a social organization which has the function of achieving more-or-less agreed upon goals in the field of education. Within each institution there are a number of positions which must be occupied by people for whom certain roles and expectations are defined. The expected behavior of a person occupying a particular position is the incumbent's role. It describes what the incumbent "ought" to do, and includes the expectations of all those connected with the position.

Difficulties may arise and role conflicts may develop when the definitions of roles and expectations are at variance with the personality needs of the incumbent. Expectations are evaluative standards applied to an incumbent of a position by the incumbents of other positions within or without the organization. Briefly, the nomothetic dimension consists of the roles or sets of expectations that will presumably fulfil the goals of the institution.

In the view of Getzels and Guba, the social system may also be thought of as consisting of individuals with their unique

personalities as determining their need-dispositions. They refer to this as the idiographic dimension. The behavior of an individual within a social system is conceived of as being a function of both his designated role and his own personality.

Thus, within the social system, there are two areas that Getzels and Guba emphasize. The first of these consists of the roles and expectations that will fulfil the goals of the system, and the second consists of the individuals within the system with their own unique personalities and need-dispositions. Getzels and Guba reason that the incumbent's behavior in the system is a function of the interaction of the role and personality dimensions of their model.⁸

The presidents, the staff members, and the students in a post-secondary institution have certain roles that they expect to, and are expected to, perform. Each person also has a unique personality and needs-disposition. The present study was concerned with the degree to which an individual in the post-secondary institution perceives himself to be satisfied in his role. That is, the degree to which he perceives his needs are being fulfilled in the performance of his role.

Role enactment. McGrath, a social psychologist, in outlining his concept of role theory, maintained that:

It is important to distinguish between the behaviors expected of a person in a particular role and the behavior that a person actually exhibits while acting in that role.⁹

⁹J. McGrath, Social Psychology. New York: Holt, Rinehart and Winston, 1964.

McGrath believed that the role behavior of any person in a given role may or may not match or fulfil the expectations which he, and others in related roles, hold for the incumbent of that role. People tend to view their own role behavior and the role behavior of others in relation to their expectations of behavior, and they evaluate themselves and others on the basis of such relationship. McGrath, as a social psychologist, was adding a variation to the theme of Getzels and Guba in the idiographic dimension.

Sarbin, a psychologist, attempted to identify reasons for variations in role enactment both cross-sectionally with different individuals performing the same role, and longitudinally with a single individual over a length of time. Sarbin concluded that:

Variations in role enactment are a function of at least three variables: (1) the validity of role perception, (2) the skill in role enactment, and (3) the current organization of self.¹⁰

Role conflict. There is a range of conflicts that can occur when an incumbent is required to conform simultaneously to a number of expectations which are mutually exclusive, contradictory, or inconsistent so that adjustment to one set of requirements makes adjustment to the other set of requirements impossible, or at least difficult. Role conflicts can arise in many ways, a few examples follow as illustrations:

(a) Disagreement within the referent groups defining the same role. For example, teaching staff members may have different

¹⁰T. Sarbin, "Role Theory," Handbook of Social Psychology. G. Lindzey (ed.), Cambridge: Addison-Wesley, 1954, p. 225.

expectations for the behavior of students.

(b) Disagreement among referent groups, each having the right to define expectations for the same role. For example, administrators and parents may differ in their expectations for the behavior of teachers.

(c) An individual's own perception of the behavior expected of him in performing his role may differ from, and conflict with, the expectations of alter groups.

(d) Contradiction in the expectations of two or more roles which an incumbent may be occupying at the same time. For example, a married teacher whose wife or child is one of his students.

The concept of role conflict has concerned students of administration ever since it was first recognized as an important variable in administration. Campbell, Corbally, and Ramseyer illustrated how the administrator is affected by four main alter-groups, each holding its own expectations for his behavior:

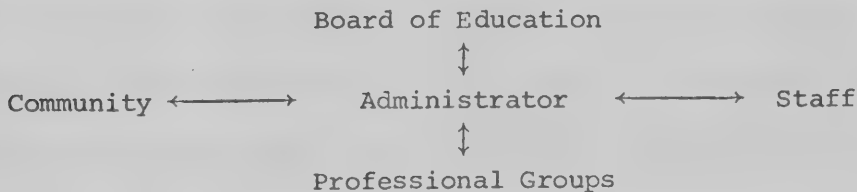


Figure 2. The Administrator's Main Alter-Groups.¹¹

This simple illustration may be used with a variety of referent groups to show conflict-producing or incompatible expectations

¹¹R. Campbell, J. Corbally and J. Ramseyer, Introduction to Educational Administration. Boston: Allyn and Bacon, 1962, p. 206.

that may affect an incumbent in any role.

Role definers, or those referent groups who attempt to define role, are seldom in complete agreement. Miklos succinctly described the phenomenon:

The concept of role conflict refers to the observation that there is never complete agreement within and among the groups which may be considered to hold legitimate expectations for the incumbent of a particular position.¹²

A recent study on role expectations and role consensus was conducted by Foskett in three Pacific Coast communities.¹³ Foskett's results indicated a high consensus for teacher role expectations from community to community by teachers with teachers, by citizens with citizens, and by principals with principals. However, there was found to be a significant disagreement among these groups in their expectations for the teacher's role. Foskett concluded that incumbents agree with other incumbents in a similar role but disagree with incumbents in different roles, at least, this appears to be the case when discussing role expectations of the elementary school teacher. Foskett's study consisted of asking groups of principals, teachers, and citizens to assign priorities to a list of suggested teacher functions.

Role conflicts occur as a result of non-congruence in the expectations of referent groups among themselves or with the individual.

¹²E. Miklos, "Role Theory in Administration," The Canadian Administrator. Vol. III, No. 2, November 1963.

¹³J. Foskett, Role Consensus: The Case of the Elementary School Teacher. C.A.S.E.A., Eugene, Oregon, 1969, p. 115.

The individual is satisfied in his role to the extent that his needs-dispositions are satisfied in the performance of his role that he perceives for himself, while considering the expectations of others. If the individual's perception of his role conflicts with the expectations of others, it is unlikely that his needs-dispositions can be fulfilled. The present study did not attempt to identify role conflicts in the post-secondary institution, although their possible existence was acknowledged as a cause of role dissatisfaction.

Role definition and personality. Confronted with a complex system of organizational facilities, role expectations, role conflicts, and conditions of work, an individual must still personally define his role and decide upon strategies to perform it. There is a clear distinction between role definition in behavioral terms and in conceptual terms. Although the two are obviously related, they are independent. That is, a role can be determined before it is enacted.

Role performance cannot be entirely viewed as merely conforming to the structural requirements of an organization such as role expectations, hierarchical authority, the presence of sanctions, and peer group influences. Other factors such as personal role conception, and the personality characteristics of the incumbent which are unique to the individual must also be considered. Need dispositions are internal forces which compel the individual to select certain forms of adaptations rather than others.

Levinson clearly stated his views on the importance of personality in role definition:

Role definition may be seen from one perspective as an aspect of personality. It represents the individual's attempt to structure his social reality, to define his place within it, and to guide his search for meaning and gratification. Role definition is, in this sense, an ego achievement -- a reflection of the person's capacity to resolve conflicting demands, to utilize existing opportunities and to create new ones, to find some balance between stability and change, conformity and autonomy, the ideal and the feasible, in a complex environment.¹⁴

Personality factors influence the basic conceptions or personal role definition that an individual holds for his organizational role. These factors influence him to conform, to deviate, to avoid or to administer sanctions, to identify with the organization that puts role demands upon him, and the degree to which he is satisfied with his role in the organization. Evidently, all of these demands are related to the organizational structure.

Levinson further developed his concept of the personality of the individual in role definition:

An individual's conception of his role in a particular organization is to be seen within a wider series of psychological contexts: his conception of his occupational role generally (occupational identity), his basic values, life goals, and conception of self. Thus, one's way of relating to the organization depends in part upon his relations in general, and upon his fantasies, conscious and unconscious, about the "good" and the "bad". His ways of dealing with the stressful aspects of organizational life are influenced by the impulses, anxieties, and modes of defence that these stresses activate in him.¹⁵

¹⁴D. Levinson, "Role, Personality, and Social Structure in the Organizational Setting," Journal of Abnormal Psychology. 58; 1959, p. 177.

¹⁵D. Levinson, op. cit., p. 178.

These psychological factors that affect the individual's perception of himself and of his role are, for him, an inseparable part of the role.

Role perception. When discussing role perception, Porter and Lawler consider the term to mean "the direction of effort."¹⁶ That is, the kinds of behaviors and activities that the incumbent believes he should engage in to perform successfully. If his personal role perceptions correspond with the expectations of his superiors in the organization and other legitimate referent groups, then he will be applying his efforts where he is most likely to achieve successful performance as defined by the institution. However, if the incumbent's role perception conflicts with the expectations others hold for that role, he may expend considerable effort without achieving organizationally defined successful performance.

Porter and Lawler's concept of role perception may be applied to administrators, teachers, and students in educational institutions. An individual in an educational institution is more likely to be successful in his role, in terms of organizationally and internally defined goals, if these goals are congruent.

Porter and Lawler's study concerned middle managers' attitudes towards pay and performance. They administered two questionnaires to determine attitude toward pay and a self-evaluation form to determine effort and performance. They found a significant relationship

¹⁶L. Porter and E. Lawler, Managerial Attitudes and Performance. Homewood, Illinois: Irwin, 1968, p. 24.

between attitude toward pay and performance. Porter and Lawler used pay as the attitude variable since it was easily measured as a factor in role satisfaction. The present study uses a variety of factors in measuring role satisfaction, of which one is salary and other benefits.

Katz and Kahn¹⁷ used the terms "role sending" and "role taking" as leading to the role perception of the "focal person." They believed that the focal person is more likely to take the role if it is sent from a trusted source, whereas other sources may lead to role conflict and/or role reappraisal. Katz and Kahn reported a number of researches which indicate that attitudes and role perceptions within an organization are related to the position that the individual holds in the hierarchy. Those in higher positions had apparently internalized the goals of the organization to a greater extent than had those in lower positions and consequently their role perceptions were more congruent with those of the organization.

Identification with the organization. Commitment to the organization and devotion to its purposes is thought by some to be a prime factor in an effective organization such as a hospital or a school. Litterer disagreed with this point of view:

Whereas a person's identification with an organization can be a valuable organizational element, to depend exclusively on it or to think that without it no organization can exist is to miscalculate its importance.¹⁸

¹⁷D. Katz and R. Kahn, The Social Psychology of Organizations. New York: John Wiley, 1967, p. 190.

¹⁸J. Litterer, The Analysis of Organizations. New York: John Wiley, 1966, p. 224.

However, Litterer believed that strong commitment to the organization results in better coordination with others who share such commitment to the organization and in a more effective and easier flow of information among the committed individuals. Each individual's role perception substantially determines what and with whom he should coordinate.

Likert¹⁹ interviewed factory workers and their supervisors, and used actual production figures. He found that coordination and cooperation among workers with their superiors usually resulted in high productivity and high job satisfaction if the workers had also established high goals for their performance in the organization. He suggested that it is the responsibility of the administrator to encourage workers to identify with the organization and its goals, through communications.

March and Simon felt that the length of time that an individual serves an organization will affect the strength of his identification with the organization and his internalization of its goals:

The longer an individual remains in an organization, the more his interactions occur within the organization, the more his needs are satisfied within the organization and, therefore, the more he identifies with the organization.²⁰

¹⁹R. Likert, New Patterns of Management. New York: McGraw-Hill, 1967, p. 59.

²⁰J. March and H. Simon, Organizations. New York: John Wiley, 1958, p. 74.

An individual who participates in the activities of an organization has achieved some level of identification with the organization, although such identification may be quite tenuous. March and Simon perceived a balance between the inducements offered by the organization and the contributions made by the participants:

The inducements-contributions balance has two major components: the perceived desirability of leaving the organization and the utility of alternatives foregone in order to stay in the organization (i.e. the perceived ease of leaving the organization).²¹

March and Simon believed that if an individual does not relish his role, and he cannot change his assigned role, his decision to leave the organization depends upon his perception of the attractiveness of the alternatives that are available to him.

Summary

Role analysts, in the pursuit of a role theory, examine such problems as the processes of socialization, interdependences among individuals, conformity and sanctions, perception, and expectations.

The field of role consists of many hypotheses and theories concerning particular aspects of role behavior. Biddle doubted that all of the research and propositions would result in a single theory:

And even if all the propositions were brought together in some organized form, they would undoubtedly not constitute a single, monolithic theory of the sort that the appellation "role theory" implies, nor would they always be distinguishable from other theoretical statements in such disciplines as psychology, sociology, and anthropology.²²

²¹Ibid. p. 110.

²²B. Biddle and E. Thomas (eds.), Role Theory: Concepts and Research. New York: John Wiley, 1966, p. 18.

The present study was concerned with presidents, staff members, and students in the post-secondary institution. The variables mentioned in this review of literature on role affect all individuals who perform a role in an organization. Although incumbents may be unaware of the influence of some of the variables, their total effect may affect the role satisfaction of the individual.

II. COMMUNICATION THEORY

Communications are an essential part of all organizations (supra, p. 2), in fact some writers, such as Thayer, believe that the efficiency and effectiveness of organizations depends directly, or indirectly, upon the efficiency and effectiveness of communications within the organization:

Investigations have reported that the ability to communicate effectively with others is the single most important ability to success in any endeavor that involves other people.²³

The importance and ubiquity of communications is universally accepted and diverse areas of research have contributed to the study of communications in an effort to develop a communication theory. These studies range from semantic and neurological studies to animal and simulation studies, but, as with role theory, the very diversity of the research has foiled attempts to tie them into a comprehensive theory. Thayer stated: "There has not been and still is not, a single comprehensive theory of communication."²⁴

²³L. Thayer, Administrative Communication. Homewood, Illinois: Irwin, 1961, p. 8.

²⁴L. Thayer, Communication and Communication Systems. Homewood, Illinois: Irwin, 1968, p. 307.

Information Processing

An individual may be regarded as an intricate information-processing system having certain inputs and certain outputs. In present day organizational life most inputs and outputs are verbal and one learns what is going on around one from what is heard and what is read. However, the individual filters the information he receives in order to make his environment more acceptable. None of the individual's orientations toward himself, to others, and to his environment would be possible without communication.

Information processing is, of course, subject to error both in input and in output. Wallen explained this complexity:

Because people use different codes, actions have no unique and constant meanings, but are substitutable. An action may express different intentions, the same intention may give rise to different actions, different actions may produce the same effect, and different effects may be produced by the same kind of action.²⁵

Each individual brings his own intricate information processing system to the organization with which he is involved and uses parts of his system to serve the organization towards achieving the organization's goals. An organization may be regarded as an even more intricate information-processing system than is an individual. Bakke described his concept of the organizational web:

²⁵J. Wallen, The Interpersonal Gap. Unpublished paper from The Northwest Educational Laboratory, 1968.

A social organization is a continuing system of differentiated and coordinated human activities utilizing, transforming, and welding together a specific set of human, material, capital, ideational, and natural resources into a unique problem-solving whole engaged in satisfying particular human needs in interaction with other systems of human activities and resources in its environment.²⁶

Bakke's view of the organization would not be plausible without equally complex communication systems and information-processing systems to provide the vehicle for these human activities.

Bavelas and Barrett emphasized the role of communications in an organization:

It is entirely possible to view an organization as an elaborate system for gathering, evaluating, recombining, and disseminating information. Communication is not a secondary or derived aspect of organization - a 'helper' of the other and presumably more basic functions. Rather, it is the essence of organized activity and is the basic process out of which all other functions derive.²⁷

Definitions of Communication

There are numerous definitions of communication and all include the transmission and/or reception of ideas among two or more individuals or groups. Some definitions emphasize trust and transaction while others emphasize language and codes. Benevento advanced a broad definition of communication:

²⁶E. Bakke, "Concept of the Social Organization" in M. Haire (ed.), Modern Organization Theory: A Symposium of the Foundation for Research on Human Behavior. New York: John Wiley, 1959, p. 37.

²⁷A. Bavelas and D. Barrett, "An Experimental Approach to Organizational Communication", Personnel. Vol. 27, 1951, p. 368.

The transmission of stimuli from one individual to another with or without conscious knowledge of such transmission on the part of one or both.²⁸

The generality of this definition permits the inclusion of non-verbal communication, unintentional communication, and indirect communication (the overt message states something different from the intent), in addition to intended communication. Benevento's definition may be too general for application in a study of organizations. A more suitable definition of communication in organizations may be:

The interchange of ideas among two or more individuals or groups by any mutually understood and convenient means.

This definition suggests that organizations tend to use communications that are direct and select rather than random. Although unintentional communications cannot be discounted, any more than can indirect and non-verbal communications, their variety and ramifications are so broad as to be beyond the scope of this discussion.

Some researchers maintain that it may be a waste of time to attempt an all-encompassing definition of communication since: "It is the basic phenomenon that occurs when a living human system takes something into account."²⁹ and: "... no acceptable definition is possible unless its creator has an understanding of the broad theory of definition-making."³⁰

²⁸P. Benevento, Administrative Communication: A Study of its Relationship to Administrative Leadership. Unpublished Doctoral dissertation, Syracuse University, 1956.

²⁹L. Thayer, Communication and Communication Systems. Homewood, Illinois: Irwin, 1968, p. 26.

³⁰A. Smith, Communication and Culture. New York: Holt, Rinehart and Winston, 1966, p. 62.

Diversity of Communications

The term "communication" was not always widely accepted as meaning any and all stimuli experienced within a living human system or a human-devised organization:

In 1935, when Kenneth Burke proposed to call his book Treatise on Communication, the publishers assured him that the title would suggest a book on telephone wires. So Burke was persuaded to accept the title Performance and Change.

By 1956, Meier indicated that "communication" suggested the following categories:

- (a) face-to-face conferences -- meetings, gossip, etc.
- (b) reading -- newspapers, books, magazines, etc.
- (c) person/machine -- instruments, gauges, radar, etc.
- (d) person/person (machine interposed) -- telephone, radio, T.V., movies, etc.
- (e) machine/machine -- feedbacks, interlocks, automatism, etc.³¹

These five categories are still basic communication systems and processes. However, today, communication and the study of communication is not limited to processes. Communication studies encompass a body of knowledge and a field of study which includes listening and perception and draws from the areas of physiology, psychology, sociology, and demography.

Messages can be verbal or non-verbal (which includes contextual and often esoteric cultural messages involving association, sexuality, territoriality, learning, play, and defence). This discussion does not cover an in-depth examination of non-verbal communications.

³¹J. Newman, "A Rationale for a Definition of Communication", in A. Smith (ed.) Communication and Culture. New York: Holt, Rinehart and Winston, 1966, p. 61.

The diversity of communications is evident in the nature of messages: (a) direct messages, such as face-to-face discussion or telephone conversations contrast with general messages such as broadcast and public address system messages; (b) messages with primary information contrast with messages with secondary information which depend upon previous knowledge and experiences; and (c) emotional messages which do not depend upon feedback contrast with messages which do require feedback, such as progressive instructions during a successful-step-by-successful-step operation.

Intelligence-Information Systems

LeBreton³² used "intelligence" and "information" interchangeably, although the more military usage of the term "intelligence" was acknowledged. LeBreton examined the presidential communication system developed by John F. Kennedy. He viewed intelligence-information systems as communication systems and emphasized that communication is an administrative function of equal importance with other administrative functions. LeBreton urged that:

Administrators should be encouraged to adopt a personal philosophy of administration which provides specific coverage for the communication function.³³

The information-intelligence system developed in accordance with LeBreton's philosophy would be formalised and would permeate the whole organization.

³²p. LeBreton, Administrative Intelligence-Information Systems. Boston: Houghton-Mifflin, 1969, p. 6f.

³³Ibid., p. 280.

Patterns of Communication Networks

No matter how large an organization may be or how complex the communication networks within the organization, there are a limited number of basic patterns that are common to all organizations, although variations on these basic patterns may be numerous. Dubin³⁴ suggested three basic communication patterns:

1. radial,
2. serial,
3. circular. These may be represented graphically:

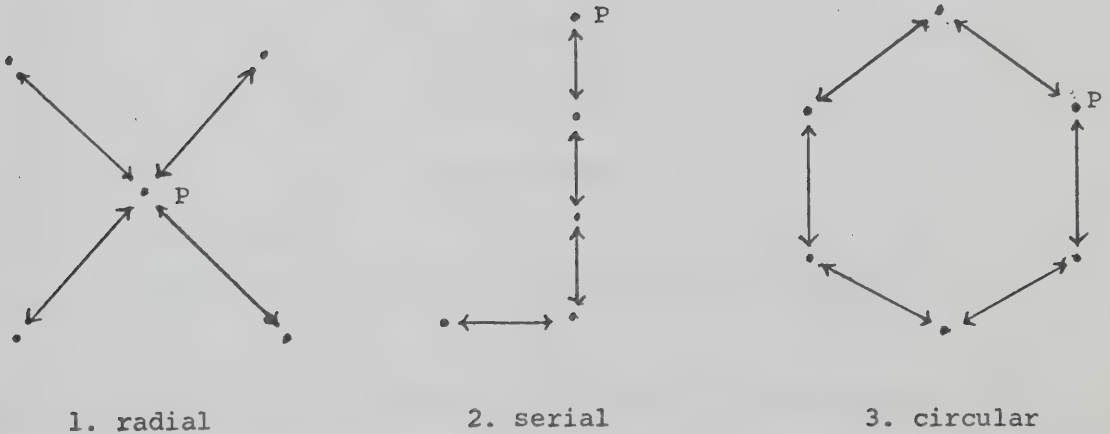


Figure 3. Three Basic Communication Networks

³⁴R. Dubin, "Stability of Human Organizations," in M. Haire (ed.), Modern Organization Theory. New York: John Wiley, 1959, p. 220ff.

Variations of these patterns may also be presented graphically:

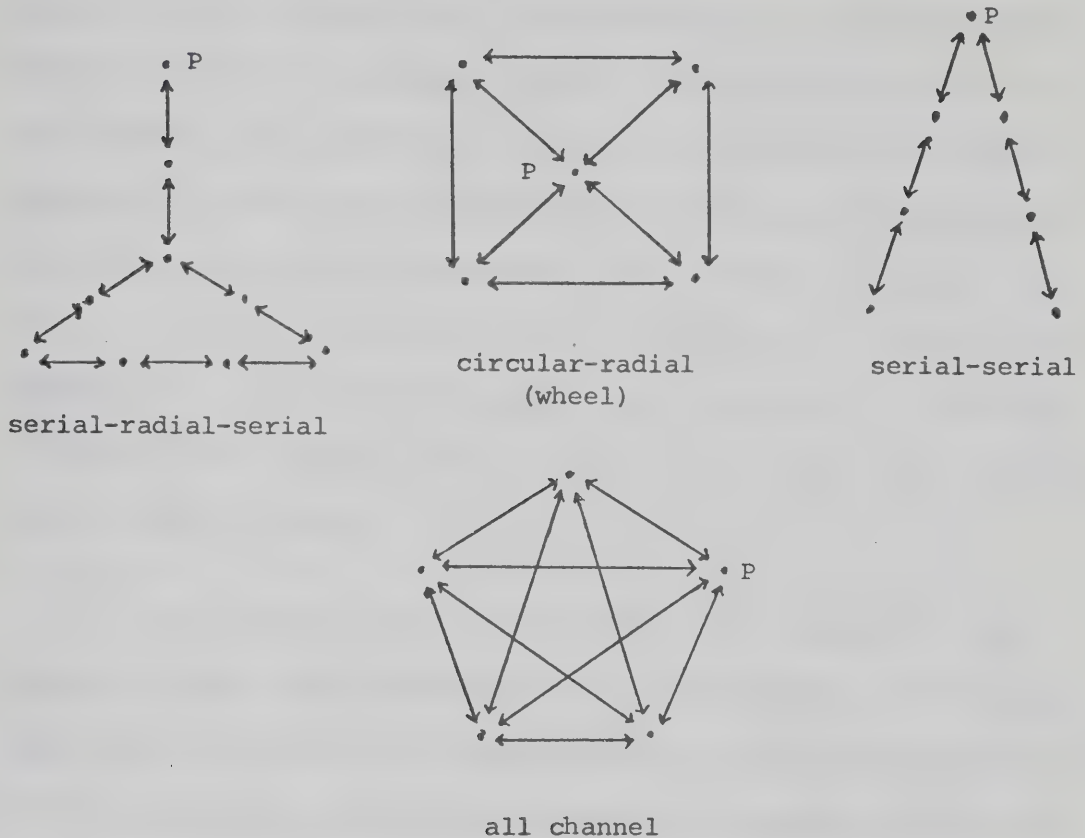


Figure 4. Variations of Three Basic Networks

The "P" in each sketch represents the manager, the president, the principal, or other senior administrative officer.

In the radial pattern, one person communicates with each of the other individuals in the organization, although each may have little opportunity to communicate with his peers. This pattern may be seen in the formal communications flow between the teachers and the principal in a small school where information is supplied directly to the principal by the teacher, and vice versa.

The serial pattern suggests the communication chain in a highly bureaucratic, formal organization. The president passes a message to the vice-president, who passes it to the department head, who passes it to the classroom teacher, who eventually relays it to the students. The argument has been made that the serial or chain approach to communication carries with it the dangers of successive inaccuracies and misinterpretations. As a message passes from one person to the next it may be gradually changed until it bears little resemblance to the original message. This phenomenon is illustrated in the children's game of "Rumor" where a whispered message is passed along a chain of players.

The circular pattern of communication is typified where persons of equal status communicate with one another. For effective communications there must be complementarity of actions among members of the organization, and such complementarity depends upon effective communications among the individuals within the organization. The circular pattern may be seen in board meetings, school staff meetings, and council meetings. In each of these there is a chairman to whom the other members automatically tend to defer. However, where all members truly have equal status, and complementarity of actions exists, the all-channel³⁵ pattern may prevail as being more effective than the circular pattern.

³⁵D. Katz and R. Kahn, The Social Psychology of Organizations. New York: John Wiley, 1966, p. 237.

The foregoing discussion of patterns and means in no way implies that one single method of communication is the best for a given situation. A formal memorandum may be the most appropriate method of communication by one person, whereas another individual, in a similar situation, may wish to converse face-to-face with the receiver, and each method may prove to be equally effective.

Accuracy and clarity in communications are important, but other criteria such as speed and cost may also determine the type of method to be used. Efficiency may sometimes be achieved by what may at first appear to be inefficient means. For example, it may be considered more efficient to issue teachers with a handbook of regulations and board policy to cover all anticipated exigencies in the interest of uniformity of behavior, but this impersonality may prove demoralising for some teachers and may result in resentment. The handbook, as a form of communication, would appear to be efficient and economical but may result in unanticipated dysfunction. An alternative, and apparently inefficient, communication, in this case, may be a personal orientation program for the teachers. The time and effort spent on such a program may result in increased identification with the organization so that emergencies can be met and solved in the light of the organization's goals.

Barriers to Effective Communication

Many writers have attempted to delimit and identify major barriers to organizational communication. Much of the following is

derived from MacKay's³⁶ compilation of the work of some of these writers.

Organizational barriers. Organizational barriers can sometimes be overcome by a reorganization of the patterns of communication or by a change in the emphases of the policymakers of the organization.

(1) Physical distance: this may be a very real barrier in a large organization where the administrator has little or no contact with lower levels, thus causing a feeling of isolation from the 'big picture' at the lower levels. Physical distance barriers are seen in very large schools where teachers become merely names to the administration, and students are numbers on computer cards. An organization with far-removed central offices is obliged to find means to overcome the physical distance barrier; modern electronic communications systems have done much to alleviate the problem, but have not solved it.

(a) Technical barriers: technical barriers often exist as a direct result of misuse of available vehicles for communication. The public address system and the wide use of memos and directives on the notice board may be considered by the administration to be an obvious means of dissemination of information. However, these methods provide little opportunity for feedback and may often be ignored completely by intended receivers.

³⁶D. MacKay, "The Principals' Role: A Pivotal Role in Communication," The Tasks of the Principal, The 1963 Leadership Course for School Principals, Edmonton, Alberta, pp. 31ff.

(3) Cost barriers: time and effort expended must be included in the cost of adequately communicating. In a small organization, a face-to-face communication may appear to be less costly than a memorandum, but the time and effort that must be spent by the administrator in such a contact may not warrant this method; other administrative functions may have a prior demand upon his time.

(4) Status-authority barriers: wherever there is a formally designated authority in an organization, such as the principal, there is always the chance that communication will be unidirectional and consequently rather ineffective, since little provision is made for feedback or discussion. If authority is displayed in an obvious fashion, the ability to communicate is hampered. The status-authority barrier can occur in any organization but is extremely dysfunctional in a school when an authoritarian principal manages to alienate his staff by flaunting his vested authority.

(5) Job specialization barriers: specialization barriers may occur when a newly appointed administrator, such as a principal, finds that he must immediately become a generalist after many years as a subject specialist. For example, a chemistry teacher with many years spent in his specialty, upon his appointment to a principalship, will find that he must oversee every aspect of school operation. It is unlikely that such a principal could readily understand and easily communicate with physical education department problems. Similarly, at the classroom level, English and biology departments may experience difficulties with communication although both may be important to each other and to the educational system.

(6) "Noise" barriers: "noise" barriers occur when the

sheer volume of communications that emanate from the administration in the form of memos, directives, public address announcements, and frequent meetings cause the intended receivers of these messages to develop screening devices in self-defence. Naturally, these screening devices will often filter out important communications as well as the less-important communications. The term "noise" is taken from the field of radio and refers to signals that interfere with clean reception. Radio filters and screening devices are more sophisticated than similar human devices and have better selectivity in isolating the important signals.

Katz and Kahn used the term "information overload" for noise/volume overflow in communications and cited Miller's seven maladaptive responses to information overload:³⁷ (1) omission, failing to process information; (2) error, incorrect processing; (3) queuing, saving information until more time becomes available; (4) filtering, eliminating some types of information; (5) approximation, collectivising broad categories of information; (6) decentralization, rechannelling of information; and, (7) escape.

Noise barriers occur in all organizations at the formal and at the informal level. A student in a seminar who speaks too frequently and/or at too great length will be "tuned out" by his fellow students especially if he is merely making words and not making an effort to communicate.

³⁷D. Katz and R. Kahn, op. cit., p. 231.

Interpersonal barriers. Interpersonal barriers exist because of the very fact that communication takes place among people.

Despite organizational attempts to provide effective communication, the ultimate criterion of effective communication is its impact upon human behavior.

(1) Value and attitude barriers: an administrator who views output alone as the most important factor in an organization is unlikely to be able to communicate freely with an associate who believes quality to be of prime importance, or with one who maintains that intraorganizational interpersonal relationships should be the first consideration.

(2) Personality barriers: these barriers usually occur where two people, such as the administrator and the subordinate, have poor interpersonal relationships and feel hostility for each other. Any communication between the two may be seriously colored by this hostility. A message may be considered threatening by either party simply because of its source. Personality barriers lead to direct misinterpretation and faulty perception, and occasionally to calculated misunderstanding.

(3) Knowledge barriers: unless the originator of a communication has a suitable background of knowledge so that he can use suitable words in phrasing his intended message, and unless the receiver has a similar background of knowledge, there can be little effective communication. The persons in a communication episode must each understand the language that is being used. This reflects the definition stated earlier (supra, p. 26).

The barriers mentioned above have real implications for the administrator. If the administrator can become aware of some of the variables that may affect his attempts to communicate with others, he may wish to adjust his behavior and his communication channels accordingly. Some recommendations for effective communication are offered later in this discussion.

Talcott Parsons viewed administration as an: "attempt to get results by getting some kind of communicative operation to bear on other persons."³⁸ Parsons believed that the administrator can succeed if he changes the situation by removing the organizational barriers to communication, and if he modifies the intentions of subordinates by removing interpersonal barriers.

Bauer emphasized the transactional nature of communication by stressing feedback; communication is unlikely to be effective if no provision is made for the receiver to express his views to the sender, both the sender and the receiver are equally important. Bauer stated that communication is: "... a transactional process, a major element in which is a widespread sense of trust."³⁹ Mutual trust and confidence have not been extensively researched in communication studies, but they undoubtedly affect effective communications.

³⁸T. Parsons, "On the Concept of Influence," Public Opinion Quarterly. Vol. 27, Spring 1963, pp. 37-62.

³⁹R. Bauer, "Communication as a Transaction; A Comment on 'The Concept of Influence,'" Public Opinion Quarterly. Vol. 27, Spring 1963, pp. 83-86.

A Communication Model

The foregoing summarizes what communication is and where it may fail. Some of the variables discussed may be represented diagrammatically:

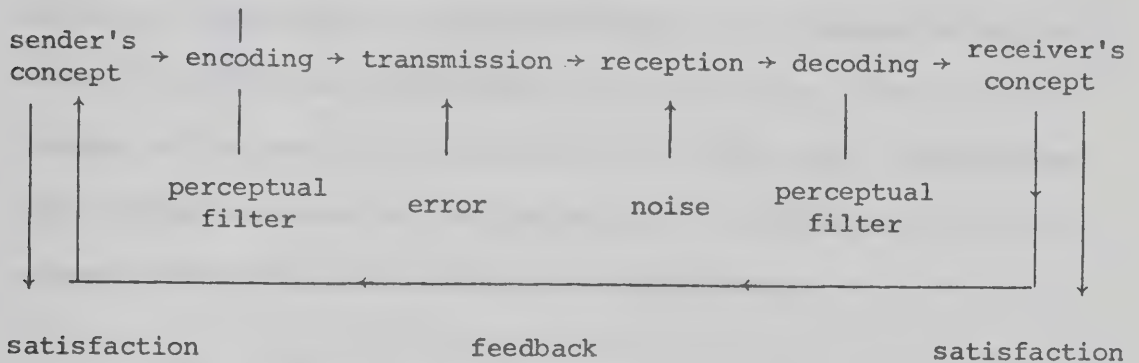


Figure 5. A Communication Model

The sender conceives a message that he wishes to transmit. He considers the best method of sending it, limited by his perception of the receiver's background, expertise, intelligence, and his estimate of how well he is accepted by the receiver. He encodes his message, using language that he expects will be understood by the receiver, considering his perception of the receiver and transmits the message by memo, telephone, public address, etc. The transmitted message is subject to error as it passes through time and space in the forms of garbled language, typographical error, semantic fault, etc. If there is too much noise or information overload surrounding the transmission, the message may be ignored or modified by being categorized. The received message is now subjected to the perceptual filters and screens of the receiver. Humans have a tendency to see and to hear that which they

wish to see and hear. A message that "fits" an individual's perception of the world and is not perceived to represent a threat to him is less likely to be screened out and is more likely to be understood and accepted. The receiver's perception of the sender as to his competence and personality also affect the receiver's ability to accept and understand the intended message. The message is decoded, subject to the above restrictions, and the receiver forms his own concept of the meaning of the message. If the sender's concept and the receiver's concept are equivalent, or reasonably similar, the communication has a good chance of being effective.

The feedback loop in the model is a mirror of the model when the receiver becomes the sender and the sender becomes the receiver. The feedback communication is also subject to perceptual filters and screens and may require a different communication vehicle from that used in the original communication. Some communications do not readily elicit feedback, such as directives on a notice board and public address announcements. However, the initiator may eventually receive feedback from such directives when he discovers whether his instructions were followed, or if he actually managed to change the behavior of the receivers. If he was unsuccessful he may be well advised to seek an alternative method of communicating.

Considering the many factors that may affect the successful completion of a communication, it is rather surprising that humans rely on communications with others to such an extent. The subconscious mind and human acculturation undoubtedly have a great deal more to do with successfully communicating than is at first apparent.

Some Recommendations for Effective Communication

Certain of the points discussed above suggest simple guidelines that may be worthy of consideration by administrators toward effective communication in organizations.

The following points are synthesized from MacKay,⁴⁰ Thayer,⁴¹ Ingram,⁴² and McCloskey:⁴³

(1) Effective communication is most likely to take place when two-way face-to-face methods are used. This method provides for immediate feedback for clarification and discussion.

(2) Written communication may be most desirable when a permanent record is required, for uniformity among all receivers, or when the complexity of the message is such that it is more explicit when written.

(3) Flexibility in the choice of vehicle, pattern, and content is necessary. Certain communications may require certain means of transmission under particular conditions, and the administrator should have available to him a variety of means as well as the knowledge of when best to use which method.

⁴⁰D. MacKay, op. cit. p. 37f.

⁴¹L. Thayer, op. cit. p. 195f.

⁴²E. Ingram, "The Principal and Public Relations," The Tasks of the Principal. Alberta Principals' Leadership Course, 1963.

⁴³G. McCloskey, Education and Public Understanding. New York: Harper, 1959, pp. 103-120.

(4) Feedback is important to all communications. The administrator should ensure that some kind of feedback mechanism is built into his communication techniques so that corrective measures may be taken, if necessary, as soon after the communication as possible.

(5) There must be a degree of mutual trust, understanding, and respect for effective communication. Trust and respect can sometimes be elicited by the use of careful wording so that the message is readily understood.

(6) Informal and personal factors affect all communications. No one can be fully aware of how others perceive him, but he can make efforts to reduce behaviors that he knows may alienate others.

(7) Communication cannot take place until all parties concerned have fully understood the message. It may be a moot point, but perfect congruence between the sender's concept and the receiver's concept rarely takes place.

(8) Information overload frequently results in maladaptive responses, such as "tuning out." This can be very dysfunctional for subsequent communications.

Cultural Limitations

Communication is recognized as being of utmost importance among people to enable them to understand each other and to exchange ideas. Only recently, and perhaps stemming from "sensitivity" programs, have people been encouraged to be completely open in their communications with one another. Most cultures have traditionally adjured members to consider others' feelings, to think before speaking, and to have something worth saying. Fear of being

misunderstood or humiliated has also created hesitancy in openness in communication.

Many passages may be found from past writers to illustrate traditional admonitions on communication:

Charles Colton (1780-1832): "When you have nothing to say, say nothing."

Richard Whately, Archbishop of Dublin (1787-1863): "Preach not because you have to say something, but because you have something to say."

Charles Swain (1801-1874): "More offend from want of thought, Than from any want of feeling."

The Reverend Sidney Smith (1771-1845), writing of Macauley, expressed the sincere feelings of many listeners: "He has occasional flashes of silence that make his conversation perfectly delightful."

Summary

Many volumes have been written on the subject of communication from the points of view of psychology, physiology, anthropology, sociology, and demography. Most of the research in these areas has been based on empirical studies and researchers' observations. The foregoing discussion has focussed on what appear to be the salient concepts underlying human communications and variables that may affect communications. Despite the innumerable studies on communications, and everything that has been learned about the process of communication, there still does not exist a single comprehensive theory of communication (Thayer, supra, p. 23). Thayer emphasized the vastness of research on communications. He cited many authors' contributions in areas

ranging from brain and neurological research to management and simulation studies, but did not attempt to report the research.

The present study was concerned with the communications of presidents, staff and students in post-secondary institutions. As in all organizations, such communications are subject to organizational and interpersonal barriers, follow certain networks, and are perceived through individuals' filters. The present research was restricted to an examination of communication patterns and communication satisfaction, as reported by participating subjects. No attempt was made to analyse barriers or perceptual filters, but their existence and effect upon the individual must be realized and acknowledged in any study of communications.

III. SATISFACTION

Research into the complex subject of human satisfaction has led to the conclusion that some individuals are content with life to a greater extent than are others.

Ideally, it would be possible to set criteria, that can be mathematically measured, for the satisfaction experienced by individuals, but humans vary in the values that they place upon rewards that may lead to satisfaction. Herzberg assumed that people can judge their own psychological state during events; he called this an "internal criterion."⁴⁴ Herzberg and his colleagues also assumed

⁴⁴F. Herzberg, B. Mausner and B. Snyderman, The Motivation to Work. New York: John Wiley, 1959, p. 12.

that "people can place their own feelings on a continuum."⁴⁵ The assumption made is that people are aware of their own feelings of satisfaction or dissatisfaction with a situation, according to their own standards of expectations of satisfaction.

The Theory of Distributive Justice

Zaleznik, Christenson and Roethlisberger believed that: "The individual's satisfaction or dissatisfaction is determined by his total situation at work and at home, in every aspect of his life."⁴⁶ They felt that each individual has his own framework of morality (what to him constitutes right and wrong, justice and injustice), and that within this framework "exists a fundamental belief in the equitable distribution of rewards."⁴⁷ Their theory, based upon questionnaires and interviews with factory workers, is that an individual's satisfaction with a situation depends upon the extent to which he perceives his efforts are justly rewarded.

Zaleznik et al. suggest that such rewards can be external (such as economic rewards, pay, and security) or internal (such as prestige and human relations).⁴⁸ This duality of rewards is similar to Porter and Lawler's concept of extrinsic rewards (administered by the organization) and intrinsic rewards (administered by the

⁴⁵Ibid. p. 14.

⁴⁶A. Zaleznik, C. Christenson and F. Roethlisberger, The Motivation, Productivity and Satisfaction of Workers. Boston: Harvard University, 1958, p. 256.

⁴⁷Ibid. p. 292.

⁴⁸Ibid. p. 323f.

individual himself).⁴⁹ Herzberg and his coresearchers identified factors that cause satisfaction and named these "satisfiers" or "motivators", found in work itself; "dissatisfiers" or "hygienes" are found in the environment.⁵⁰ These, too, show the concept of duality. The hierarchy of human needs that was developed by Maslow ranged from most prepotent to least prepotent, that is, from basic biological needs to self-actualization needs.⁵¹ Extrinsic and intrinsic rewards are similar to Maslow's two extremes. The questionnaires that were administered in the present study included items of both extrinsic and intrinsic values, such as salary and coworkers.

Equity of Rewards

Part of the theory of distributive justice is the concept of equity of rewards. Zaleznick et al. considered that: "The goal of individual behavior is the satisfaction of individual needs."⁵² An individual establishes his own needs, whether consciously or unconsciously, and perceives the degree of equity of the rewards he receives toward satisfying those needs.

Porter and Lawler refer to rewards as: "... desirable states of affairs that a person receives from either his own thinking or the actions of others."⁵³ Porter and Lawler describe perceived

⁵⁰F. Herzberg, et al., op. cit., p. 113.

⁵¹A. Maslow, Motivation and Personality. New York: Harper, 1954.

⁵²Zaleznick et al., op. cit., p. 323.

⁵³L. Porter and E. Lawler, op. cit. p. 29.

equitable rewards as:

... the level or amount of rewards that an individual feels he should receive as a result of a given level of performance.⁵⁴

This is a very personal matter for the individual and occasionally he may take into account factors that the organization (management) might not consider in deciding upon equitable rewards that should be provided.

A study by Morse concerned the relationship between the productivity and job satisfaction of clerical workers. She conducted 742 personal interviews and identified four broad areas of satisfaction: (a) intrinsic job satisfaction; (b) financial and role status satisfaction; (c) company involvement; and, (d) pride in group performance. She concluded that strong needs led to strong motivation and stated her view of satisfaction as:

The greater the amount the individual gets, the greater his satisfaction, and at the same time, the more the individual still desires, the less his satisfaction.⁵⁵

She did not suggest that anything that the individual receives will lead to his satisfaction, but rather that the level of satisfaction is a function of the level of needs and aspirations and the level of returns from the environment; rewards must be considered to be equitable for satisfaction.

⁵⁴L. Porter and E. Lawler, loc. cit.

⁵⁵N. Morse, Satisfactions in the White-collar Job. Ann Arbor: University of Michigan, 1953, p. 28.

Types of Rewards

Many researchers have examined a variety of reward factors for their effects upon role satisfaction.

Morse examined such areas as: salary, supervision, demography, tenure, coworkers, type of work, and status.⁵⁶

Porter and Lawler classified five general reward areas which are reminiscent of Maslow's hierarchy: security, social, esteem, autonomy, and self-actualization.⁵⁷ Porter and Lawler restricted their study to managers' satisfaction with pay.

Zaleznik and his associates conducted research to examine: type of work, pay, working conditions, benefits, supervision, coworkers, and the union.⁵⁸

Herzberg et al. conducted personal interviews to determine workers' attitudes towards incidents concerning: achievement, recognition, work itself, responsibility, advancement, salary, growth, status, security, coworkers, supervision, administration, and working conditions.⁵⁹

Ronan⁶⁰ asked workers to assign priorities to a list of

⁵⁶Ibid., p. 169f.

⁵⁷L. Porter and E. Lawler, op. cit., p. 131.

⁵⁸A Zaleznik, et al., op. cit., p. 258.

⁵⁹F. Herzberg, et al., op. cit., p. 60f.

⁶⁰W. Ronan, "Individual and Situational Variables Relating to Job Satisfaction," Journal of Applied Psychology. February 1970, 54(1), Part 2, p. 2.

factors that he felt contributed to satisfaction. Maier⁶¹ referred to "studies" and reported his own psychological impressions of a number of role satisfaction factors. Yuzuk⁶² asked workers to evaluate factors on a scale. The factors used by these three researchers were: content of work, supervision, organization and management, advancement, pay and other benefits, coworkers, and working conditions. The factors studied cover a wide range of rewards, some are extrinsic and some are intrinsic. Each factor has its own effect upon the individual in the organization and his satisfaction with his role. These seven factors were used in the present study as determinants of role satisfaction.

Needs Dispositions and Gratification

Getzels, Lipham and Campbell stated: "When an individual performs in accordance with his needs .. he is actualizing himself."⁶³ They maintained that the social system should permit both role adaptation and self-actualization so that the individual may be integrated in the institution. That is, institutional role expectations and individual need dispositions can both be satisfied and provide satisfaction for the individual (see Fig. 1, supra p. 11).

⁶¹N. Maier, Psychology in Industry. Boston: Houghton-Mifflin, 1965, p. 125f.

⁶²R. Yuzuk, The Assessment of Employee Morale. Columbus, Ohio: Bureau of Business Research, Ohio State University, 1961.

⁶³J. Getzels, J. Lipham and R. Campbell, Educational Administration as a Social Process. New York: Harper and Row, 1968, p. 119f.

Jackson combined his own observations, based on personal interviews with workers, with the writings of others and wrote of satisfaction in terms of "total return"⁶⁴ as an indicator of whether a person is receiving gratification or deprivation of his needs. He pointed out the importance of achieving an optimum gratification/deprivation balance.

Ross and Zander interviewed factory workers and clerks to determine reasons for their role satisfaction. They also interviewed ex-workers from the same organizations to determine their reasons for leaving. Ross and Zander concluded that:

... personal needs are for recognition, for autonomy, for a feeling of doing work that is important, and for evaluation by fair standards, .. anxiety develops in those employees who state that their needs for autonomy and fair evaluation are not satisfied.⁶⁵

Generally, the individual finds that he can fulfil the expectations that the institution holds for his role, and that he can achieve an acceptable degree of satisfaction of his need dispositions in his role, although these need dispositions may be at a highly prepotent level. If the individual finds that his situation is incompatible in satisfying his needs and he cannot change his situation, the only recourses left to him are to leave the organization, or to reach a compromise with himself by satisficing his needs.

⁶⁴J. Jackson, "Structural Characteristics of Norms," in B. Biddle (ed.), Role Theory, New York: John Wiley, 1966, p. 125.

⁶⁵J. Ross and A. Zander, "Need Satisfaction and Employee Turnover," in M. Wadia (ed.), Management and the Behavioral Sciences. Boston: Allyn and Bacon, 1969, p. 133.

Role Satisfaction

The foregoing has dealt with some of the factors that may affect the satisfaction of an individual in his role. Some of the concepts discussed may be represented graphically:

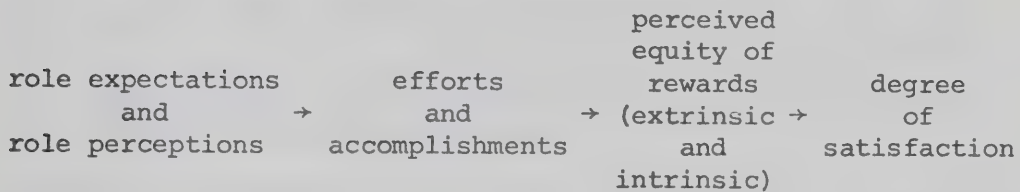


Figure 6. A Role Satisfaction Model

The individual occupying any position holds certain values and expectations for his role in that position which may, or may not, agree with the expectations of the organization. He makes a decision as to the amount of effort he must expend to achieve expected accomplishments in that role in order to receive certain rewards. The rewards for his efforts and accomplishments may be extrinsic (from the organization) or intrinsic (psychic benefits). If the individual considers that his rewards are fair and just (equitable) he will likely enjoy more satisfaction in his role than if he perceives his accomplishments and rewards as being inequitable.

Communication Satisfaction

Part II of this chapter was concerned with a discussion of communications in organizations. Communications have received very little attention as an area of study in relation to role satisfaction.

Communications are undoubtedly a source of satisfaction or

dissatisfaction to an individual in an organization since they form an integral part of organizations and of human behavior. In discussing communications, based upon his own personal experiences and observations, Mitchell, Chancellor of the University of Denver, stated that:

... for some, whatever is communicated is too much, for others, whatever is communicated is not enough, and for still others, whatever is communicated is a mis-communication. The interesting thing is that it can be the same message in each case.⁶⁶

Mitchell implied that such communications would not cause satisfaction, especially when: "... the average person receives, in the course of a single day, some 1500 messages."⁶⁷

Lawler, Porter and Tennenbaum⁶⁸ conducted a study with industrial managers and reached the conclusion that certain communications produced positive reactions (satisfaction) while others resulted in negative attitudes (dissatisfaction). They used a record form similar to that used in the present study.

Thayer drew an analogy between biological nourishment and mental nourishment:

⁶⁶M. Mitchell, "Over-, Under-, and Mis-Communication in our Society, in L. Thayer (ed.), Communication. New York: MacMillan, 1970, p. 326.

⁶⁷loc. cit.

⁶⁸E. Lawler, L. Porter and A. Tennenbaum, "Managers' Attitudes Toward Interaction Episodes," Journal of Applied Psychology. 1968, Vol. 52, No. 6, pp. 432-439.

There is a phenomenon known as "communication satisfaction"; one's feeling of satisfaction about any communication encounter will depend keenly upon the contribution that encounter makes to his basic communication metabolism.⁶⁹

This metabolism refers to Thayer's contention that the psychological system "feeds" on communications.

Thayer further stated:

There is some personal satisfaction inherent in successfully communicating-to someone or in successfully being communicated-with (whether in fulfillment of a conscious need or a non-conscious "appetite"). And there is inevitably some feeling of dissatisfaction when our needs or expectations (whether inputting or outputting) are not fulfilled in our communicative encounters.⁷⁰

An individual performing a role in an organization must be part of the communication network of the organization. Many factors affect the satisfaction of an individual with his role, and one factor that has received only a cursory examination is that of communications. The thrust of the present study was to explore the relationship that may exist between role satisfaction and communication satisfaction, while in no way suggesting that communication is a more important factor in role satisfaction than are other factors.

Although an individual performs his role in a position, the distinction between the two terms may be only slight. For the purposes of this study, role refers to the dynamic aspect of a status or position and includes the individual's attitudes towards the various

⁶⁹L. Thayer, Communication and Communication Systems. Homewood, Illinois: Irwin, 1968, p. 33.

⁷⁰Ibid., p. 144.

elements of his role. Biddle and Thomas⁷¹ quote Linton's statement that: "... role and status (position) are quite inseparable, and the distinction between them is of only academic interest."

Thus, role satisfaction of the individual includes his satisfaction with extrinsic as well as intrinsic factors, such as salary and coworkers.

Summary

Chapter II was concerned with the theoretical framework of the study. The hypotheses suggested that there is a positive relationship between role satisfaction and communication satisfaction. This chapter explored literature in areas of role theory that pertain to the study of role satisfaction and dissatisfaction from a theoretical point of view and with references to research. Selected literature was also cited pertaining to communication theory and research as well as research on the subject of satisfaction and factors that may contribute to role satisfaction and communication satisfaction.

Chapter III contains a description of the research design and methodology that were used in the study.

⁷¹B. Biddle and E. Thomas, op. cit., p. 7.

IV. REFERENCES FOR CHAPTER II

- Bakke, E., "Concept of the Social Organization" in M. Haire (ed.) Modern Organization Theory: A Symposium of the Foundation for Research on Human Behavior. New York: John Wiley, 1959.
- Bauer, R., "Communication as a Transaction: A Comment on 'The Concept of Influence,'" Public Opinion Quarterly. Vol. 27, Spring 1963.
- Bavelas, A., and D. Barrett, "An Experimental Approach to Organizational Communications," Personnel. Vol. 27, 1951.
- Benevento, P., Administrative Communication: A Study of its Relationship to Administrative Leadership. Unpublished Doctoral Dissertation, Syracuse University, 1956.
- Biddle, B., and E. Thomas (eds.) Role Theory: Concepts and Research. New York: John Wiley, 1966.
- Campbell, R., J. Corbally and J. Ramseyer, Introduction to Educational Administration. Boston: Allyn and Bacon, 1962.
- Chase, F., "How to Meet Teachers' Expectations of Leadership," Administrators' Notebook, Vol. I, No. 9, April 1954.
- Dubin, R., "Stability of Human Organizations," in M. Haire (ed.) Modern Organization Theory. New York: John Wiley, 1959.
- Foskett, J., Role Consensus: The Case of the Elementary School Teacher. C.A.S.E.A., Eugene Oregon, 1969.
- Getzels, J., and E. Guba, "Social Behavior and the Administrative Process," The School Review. LXVII, Winter 1957.
- Getzels, J., J. Lipham and R. Campbell, Educational Administration as a Social Process. New York: Harper and Row, 1968.
- Gross, N., W. Mason and A. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role. New York: John Wiley, 1958.
- Ingram, E., "The Principal and Public Relations," The Tasks of the Principal. Alberta Principals' Leadership Course, 1963.
- Jackson, J., "Structural Characteristics of Norms," in B. Biddle (ed.) Role Theory. New York: John Wiley, 1966.
- Katz, D., and R. Kahn, The Social Psychology of Organizations. New York: John Wiley, 1967

- Lawler, E., L. Porter and A. Tennenbaum, "Managers' Attitudes Toward Interaction Episodes," Journal of Applied Psychology. 1968, Vol. 52, No. 6.
- LeBreton, P., Administrative Intelligence-Information Systems. Boston: Houghton-Mifflin, 1969.
- Levinson, D., "Role, Personality, and Social Structure in the Organizational Setting," Journal of Abnormal Psychology. Vol. 58, 1959.
- Likert, R., New Patterns of Management. New York: McGraw-Hill, 1967.
- Litterer, J., The Analysis of Organizations. New York: John Wiley, 1966.
- MacKay, D., "The Principalship: A Pivotal Role in Communication," The Tasks of the Principal. Alberta Principals' Leadership Course, 1963.
- Maier, N., Psychology in Industry. Boston: Houghton-Mifflin, 1965.
- March, J. and H. Simon, Organizations. New York: John Wiley, 1958.
- Maslow, A., Motivation and Personality. New York: Harper, 1954.
- McCloskey, G., Education and Public Understanding. New York: Harper, 1959.
- McGrath, J., Social Psychology. New York: Holt, Rinehart and Winston, 1964.
- Miklos, E., "Role Theory in Administration," The Canadian Administrator. Vol. III, No. 2, November, 1963.
- Mitchell, M., "Over-, Under-, and Mis-Communication in Our Society," in L. Thayer (ed.) Communication. New York: MacMillan, 1970.
- Morse, N., Satisfactions in the White-Collar Job. Ann Arbor: University of Michigan, 1953.
- Newman, J., "A Rationale for a Definition of Communication," in A. Smith (ed.) Communication and Culture. New York: Holt, Rinehart and Winston, 1966.
- Parsons, T., "On the Concept of Influence," Public Opinion Quarterly. Vol. 27, Spring 1963.
- Porter, L., and E. Lawler, Managerial Attitudes and Performance. Homewood, Illinois: Irwin, 1968.

- Ross, J. and A. Zander, "Need Satisfaction and Employee Turnover," in M. Wadia (ed.) Management and the Behavioral Sciences. Boston: Allyn and Bacon, 1969.
- Reeves, A., H. Melsness and J. Cheal, Educational Administration: The Role of the Teacher. Toronto: MacMillan, 1962.
- Ronan, W., "Individual and Situational Variables Relating to Job Satisfaction," Journal of Applied Psychology. February 1970, 54 (1), Part 2.
- Sarbin, T., "Role Theory," in G. Lindzey (ed.) Handbook of Social Psychology. Cambridge: Addison-Wesley, 1954.
- Smith, A., Communication and Culture. New York: Holt, Rinehart and Winston, 1966.
- Thayer, L., Administrative Communication. Homewood, Illinois: Irwin, 1961.
- Thayer, L., Communication and Communication Systems. Homewood, Illinois: Irwin, 1968.
- Wallen, J., The Interpersonal Gap. Unpublished paper for the Northwest Educational Laboratory, 1968.
- Yuzuk, R., The Assessment of Employee Morale. Columbus, Ohio, Bureau of Business Research, Ohio State University, 1961.
- Zaleznik, A., C. Christenson and F. Roethlisberger, The Motivation, Productivity and Satisfaction of Workers. Boston: Harvard University, 1958.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The post-secondary institutions that were asked to participate in the study are widely distributed throughout the province. Each president was contacted by letter and by telephone and each expressed willingness to participate and to use the mails for the distribution and return of questionnaires and forms. The use of the mails obviated the necessity for visiting each institution and conducting one hundred and eighty-six personal interviews. Personal interviews might have disrupted the time-scheduling of the institution; also, the Communication Record Form did not lend itself to the personal-interview method.

I. THE SAMPLE

Six post-secondary institutions in Alberta were asked to participate in the study. The institutions were: The Northern Alberta Institute of Technology, The Southern Alberta Institute of Technology, Fairview Agricultural-Vocational College, Olds Agricultural-Vocational College, Grande Prairie College, and Mount Royal College.

Each college has its own scheme whereby subjects for participation in research are selected on a rotation basis. After commitment was received from all six presidents, each was requested to select^{*} ten staff members and twenty of his

^{*}The president of the college assigns such selection to the coordinator of research. A great deal of research is conducted in the colleges each year and procedures have been adopted toward a fair distribution among all staff and students.

students also to participate. Again, willingness was expressed from the colleges. The researcher made it clear that he would be available to visit each college to discuss any points of the study that may need clarification. None of the presidents considered that such a visit was necessary, although the mails and the telephone were used to explain minor details.

Questionnaires and forms were sent to each of the six colleges in sufficient numbers for each participant to receive one questionnaire and twenty Communication Record Forms (these will be discussed later in this chapter). Each participant was also provided with brief instructions for the completion of the questionnaire and forms (Appendix C).

Five of the six colleges had returned most of the materials by the end of May. One college advised, late in May, that it preferred not to participate due to the pressure of examinations and other commitments. Table I shows the potential number of respondents and the actual percentage of participants:

TABLE I
POTENTIAL AND ACTUAL RESPONDENTS

Potential Number		Actual Number	Percentage
Presidents	6	5	83.3
Staff	60	50	83.3
Students	120	82	68.3
TOTAL	186	137	73.6

Although a return of 100 percent was not received, the actual return was considered to be sufficiently high to be representative of presidents, staff, and students in the institutions that were contacted. Moreover, since no pressure of any kind was brought to bear on any member of the potential sample by the researcher, perhaps the actual participation of the respondents stemmed from a conviction that the study was worthwhile.

II. THE COMMUNICATION RECORD FORM

The Communication Record Form was adapted from the form used by Lawler, Porter and Tennenbaum¹ in an examination of the attitudes of middle-managers toward communication episodes with their business contacts.

Respondents were asked to complete twenty Communication Record Forms during a five-day period. No direction was given as to the type of communications to be recorded since it was assumed that any direction might be restrictive for the respondent and place artificial limits upon the study. The communication episodes that were recorded were assumed to be a representative sample of all communications in which the respondent was involved during five days.

The Communication Record Form contained items in the following areas: (1) type of contact (letter, telephone, etc.); (2) position

¹E. Lawler, L. Porter and A. Tennenbaum, "Managers' Attitudes Toward Interaction Episodes," Journal of Applied Psychology. 1968, Vol. 52 (6), pp. 432-439.

of other person (president, staff, student, other); (3) contact initiated by self or other person; (4) type of activity (administration, instruction, etc.); (5) purpose of communication (giving/receiving information or giving/receiving instruction); (6) the respondent's attitude toward that communication (essentially, his satisfaction with the communication); and, (7) whether the communication was formal or informal. See Appendix A.

The Communication Record Form is simple and merely required the respondent to place check marks against each item that applied to that particular communication. Item Six on the form contains ten areas which ask the subject to assess his feelings about that communication episode from "good" to "bad" on a seven-point Likert-type scale. This design was also used by Lawler et al.

Each participant was provided with only twenty forms: it was estimated that it would require roughly ten minutes total time to complete all twenty forms during the five-day period. The form was designed so that the same form could be used by the president, the staff, and the students. An identification number was assigned to each participant in order to ensure anonymity and to eliminate any question of the responses being used for purposes other than those of the study.

The research by Lawler and his colleagues suggested to them that their study had both content and methodological implications for further research. They stated that their research provided definite information for the study of communications in organizations and for

explaining certain job satisfaction patterns that occurred in organizations as a direct outcome of these communication patterns and systems. The researchers also stated that their study was methodologically sound since the form was well received by the participants and it provided a straightforward way in which to measure attitudes toward communication episodes.

III. THE QUESTIONNAIRE

The Questionnaire (see Appendix B) for the study consisted of three separate forms, one for the president, another for staff members, and yet another for students. The questionnaire was designed to determine role satisfaction by measuring the satisfaction felt by incumbents in areas of the institutional life: (a) content of work; (b) organization and management; (c) salary and other benefits; (d) coworkers; (e) opportunity for advancement; (f) working conditions; and, (g) supervision. These factors were discussed in the previous chapter (supra, p. 48).

A pilot study on the questionnaire was conducted before the research commenced (see Appendix D). The analysis of the pilot included an item-and factor analysis in order to ascertain the validity and reliability of the items in the questionnaire. The results obtained on the questionnaires in the actual study were also item- and factor analysed, as reported in Chapter IV.

The questionnaire consisted of twenty-three items, each of which required the subject to assess the degree to which he felt

satisfaction or dissatisfaction with that item on a seven-point scale. Each of the seven factors mentioned above was purported to be represented by three items in the questionnaire. Two of the items simply asked the subject his satisfaction with communications in the organization.

Each participant was assigned an identification number and was requested to use this number on his questionnaire and on all of his Communication Record Forms. In this way, the respondent was assured that his submissions would be completely anonymous while enabling the researcher to match questionnaires with Communication Record Forms.

IV. METHODOLOGY

The study was primarily intended to examine the relationship between role satisfaction and communication satisfaction. One of the assumptions that was made was similar to the main assumption made by Herzberg et al., that is, that individuals are capable of putting their own feelings about a situation on a continuum² (supra p. 44).

The questionnaire contained items that required the subject to place his feelings on a seven-point continuum, (seven being highly satisfied and one being highly dissatisfied). The

²F. Herzberg, B. Mausner and B. Snyderman, The Motivation to Work. New York: John Wiley, 1959, p. 12.

scores on each item were added to give the individual's role satisfaction score.

Item Six of the Communication Record Form consisted of ten areas to which the subject was required to react regarding his attitude toward that communication. Each area was on a seven-point scale from a "good" reaction to a "poor" reaction; for example: the communication was: Valuable 7 6 5 4 3 2 1 Worthless. The scores on each form returned by each subject were added, and averaged to provide his Average Communication Satisfaction Score. The respondents in the study returned an average of sixteen forms each.

The score of each subject on the questionnaire and the score of the same subject for communication satisfaction were used as outlined in Chapter IV, Analysis of the Data.

V. DEFINITION OF TERMS

Communication satisfaction and role satisfaction were the two main variables that were measured in the study.

Communication Satisfaction

Communication satisfaction is defined as the degree to which an individual perceives a communication to be acceptable to him and was measured by totalling the responses to Item Six of the Communication Record Form.

Role Satisfaction

Role satisfaction is defined as the degree to which an

individual perceives his occupation to be acceptable to him and was measured by totalling the responses to the Questionnaire.

Conclusion

Although the research design and the method for the collection of the data are quite simple and straightforward, the emphasis is on the contention that individuals are the best judges of their own feelings about the world around them. It is futile to state that person A is more satisfied with his situation than is person B, since no external criterion can be applied to human satisfaction. However, as Herzberg maintained, "an internal criterion"³ exists in all people and a person is actually satisfied to the extent that he perceives himself to be satisfied. An outsider can only estimate the degree of satisfaction felt by another. The questionnaire and the Communication Record Forms quantified the individual's satisfaction according to the individual's own internal criteria.

Summary

This chapter has outlined the design of the research, the constitution of the sample, and the method used in the collection of the raw data.

Chapter IV contains a restatement of the four major hypotheses and the related hypotheses. This is followed by a section on the testing of the hypotheses and a discussion of the findings. The final part of the chapter is devoted to a detailed analysis of the Communication Record Forms and an analysis of the questionnaire.

³F. Herzberg, loc. cit.

CHAPTER IV
ANALYSIS OF THE DATA

I. HYPOTHESES

The hypotheses were derived directly from the stated problems of the study.

Hypothesis One

Role satisfaction of those in the post-secondary institutions, that is, the presidents, the staff, and the students, as measured by the Questionnaires, is positively correlated with satisfaction felt with communications in the post-secondary institutions, as measured by the Communication Record Form.

Hypothesis Two

Role satisfaction of the president of the post-secondary institution, as measured by the President Questionnaire, is positively correlated with his satisfaction with communications in the post-secondary institution, as measured by the Communication Record Form.

Hypothesis Three

Role satisfaction of the staff of the post-secondary institution, as measured by the Staff Questionnaire, is positively correlated with the satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

Hypothesis Four

Role satisfaction of the students in the post-secondary institution, as measured by the Staff Questionnaire, is positively correlated with the satisfaction felt with communications in the post-secondary institution, as measured by the Communication Record Form.

II. TESTING THE HYPOTHESES

Testing Hypothesis One

Hypothesis One tentatively suggested a positive correlation between the role satisfaction of presidents, staff, and students in the post-secondary institutions and their satisfaction with communications in the post-secondary institutions.

The Average Communication Satisfaction Scores of each subject were calculated, as described in the previous chapter. These scores were then correlated with the subject's role satisfaction score as measured on the Questionnaires. Using a Pearson product-moment correlation, a positive correlation of .480 was found between the two variables. This is significant beyond the .01 level of confidence, according to Ferguson.¹ The research hypothesis was accepted.

Testing Hypothesis Two

Hypothesis Two made the tentative suggestion that a positive

¹G. Ferguson, Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1959, p. 315, Table F, "Critical Values of the Correlation Coefficient".

correlation existed between the role satisfaction of presidents of post-secondary institutions and their satisfaction with communications in the post-secondary institution.

The previously calculated Average Communication Satisfaction Scores of the presidents and their role satisfaction scores from the President Questionnaires were correlated using a Pearson product-moment technique. A positive correlation of .925 was found between the two variables. This is significant beyond the .01 level of confidence and gave grounds for accepting the research hypothesis.

Testing Hypothesis Three

Hypothesis Three tentatively suggested a positive correlation between the role satisfaction of staff members in the post-secondary institution and their satisfaction with communications in the institution.

The Average Communication Satisfaction Scores of the participating staff members were correlated with the same individual's scores on the Staff Questionnaires. The communication satisfaction scores of the staff were then correlated with their role satisfaction scores using a Pearson product-moment. A positive correlation of .499 was found between the two variables. This is significant beyond the .01 level of confidence. The research hypothesis was thus accepted.

Testing Hypothesis Four

Hypothesis Four suggested that a positive correlation existed between the role satisfaction of students in the post-secondary

institution and their satisfaction with communications in the institution.

The role satisfaction of each student was calculated from the Student Questionnaires; this was then correlated with the student's Average Communication Satisfaction Score using a Pearson product-moment. A positive correlation of .429 was found between these two variables which is significant beyond the .01 level of confidence. On this basis the research hypothesis was accepted.

Discussion

Table II summarizes the Pearson product-moment correlations that were found between the two variables, role satisfaction, as measured by the scores on the Questionnaire, and communication satisfaction, as measured by Item Six of the Communication Record Form.

TABLE II
CORRELATIONS BETWEEN ROLE SATISFACTION
AND COMMUNICATION SATISFACTION

Hypothesis	Group	N	r
One	All Subjects	137	.480*
Two	Presidents	5	.925*
Three	Staff	50	.499*
Four	Students	82	.429*

* $p < .01$

The data indicate that a significant positive correlation exists between role satisfaction and satisfaction with communications as experienced by presidents, staff, and students in post-secondary institutions as measured in the study. The data do not suggest that role satisfaction is entirely dependent upon satisfaction with communications. Other factors undoubtedly have a bearing on role satisfaction. However, the data do support the contention that communications may be a factor in the role satisfaction of those in the post-secondary institution.

The high correlation found between the role satisfaction of the president and his satisfaction with communications may indicate that the president perceives his role in terms of his interactions with others, certainly most of his behavior in his role is concerned with communications.

The role satisfaction of the staff and the students also showed a high correlation with their satisfaction with communications. The speculation could be made that staff and students are also concerned with factors other than communication that affect their roles. The discussion of the factor analysis of the Questionnaire later in this chapter includes an analysis of communication satisfaction when correlated with other factors that may influence role satisfaction.

III. RELATED HYPOTHESES

The related hypotheses derived from the four main hypotheses. In general, the related hypotheses suggested that role satisfaction

and the satisfaction felt with communications between certain groups would be positively correlated. The correlations calculated were as follows:

Role satisfaction of:			Communication satisfaction with:	r	f	N
(1)	President	and	Staff	.990	40	5
(2)	President	and	Students	.860	15	5
(3)	President	and	Community	.781	50	5
(4)	Staff	and	Staff	.446	289	50
(5)	Staff	and	Students	.453	183	50
(6)	Staff	and	President	.450	24	24
(7)	Staff	and	Community	.002	89	50
(8)	Students	and	Staff	.141	506	82
(9)	Students	and	Students	.570	642	82
(10)	Students	and	President	.005	13	13
(11)	Students	and	Community	.135	330	82

In each of the above pairs, the role satisfaction scores of the members of the first group were correlated with their communication satisfaction scores, from the Communication Record Form, when a communication episode took place with a member of the second group. These data were taken from Item Two (position of other person, president, student, staff, other) and from Item Six (satisfaction felt with that communication) of the Communication Record Form, and from the role satisfaction scores on the Questionnaires. A Pearson product-moment correlation computer program was used for the calculations. The results are shown in tabular form in Table III:

TABLE III
CORRELATIONS BETWEEN ROLE SATISFACTION
AND COMMUNICATION SATISFACTION
AS EXPERIENCED BY GROUPS

Role Satisfaction of:	Communication Satisfaction with: (N)			
	President	Staff	Students	Community
President		.990* (5)	.860* (5)	.781** (5)
Staff	.450** (24)	.446* (50)	.453* (50)	.002 (50)
Students	.005 (13)	.141 (82)	.570* (82)	.135 (82)

* $p < .01$

** $p < .05$

Discussion of Group-with-Group Results

Presidents with presidents. The Communication Record Forms received from presidents recorded no contact with other presidents.

Presidents with Staff. Forty forms (38 percent) were received from presidents recording communications with staff members. The satisfaction of the president with his role was correlated with his satisfaction with these staff communications and a correlation of .990 ($p < .01$) was found. This high correlation would indicate that the president's communications with his staff play a very important part in his performance of his role and in his satisfaction with his role. The president of a post-secondary institution cannot operate effectively as senior administrator without the support of his staff

and their intercommunications. He may expect his staff to respond to his communications with them by acting upon his communications and by receiving feedback from them which may also give him an indication of the extent to which the institution is achieving its goals. In this way the president perceives his satisfaction with his role.

Presidents with students. A correlation of .860 ($p < .01$) was found between the president's role satisfaction and his satisfaction with communications with students. This high correlation would suggest that the president's communications with students have an important effect upon his role satisfaction. This might be expected since the students in the post-secondary institution are the reason for the existence of the president's role. A point of interest is that only fifteen communications with students were recorded by presidents participating in the study. Apparently, presidents have few personal contacts with students, being involved with administrative details, not necessarily by choice. The fact that few communications with students were recorded (14 per cent) does not mean that presidents are rarely in touch with students; it merely means that few were recorded during the time of the present study. However, the number of communications recorded by students with presidents was also very low (less than 1 percent).

Presidents with the community. Presidents participating in the study recorded fifty communications (48 per cent) with outside individuals and agencies. The presidential satisfaction with role and satisfaction with these communications gave a correlation of

.781 ($p < .05$), indicating that communications with these outside contacts, but within the relevant environment of the post-secondary institution, are very important to the role satisfaction of the president. The presidents recorded a greater number of communications with groups outside the institution than they recorded with either of the groups within the institution. The high number of such communications and the high correlation that was found would indicate that the president of a post-secondary institution may find that part of his role as president is his function in liaison activities between the institution and its environment.

Staff with president. The role satisfaction of the participating staff members, when correlated with their satisfaction with the twenty-four (4 per cent) recorded communications with presidents, gave a correlation of .450 ($p < .05$). Rapport and compatability of institutional goals and policies play an important part in the satisfaction felt by the staff with the leader, with the institution, and with their role in the institution. The correlation in this case indicated that communications between the president and his staff have a significant bearing on the role satisfaction of the staff.

Staff with Staff. A correlation of .446 ($p < .01$) was found between the role satisfaction of staff members and the two hundred eighty-nine recorded communications (50 per cent) with other staff members. Teachers spend much of their professional and social life with other teachers and the communications among them stem from similar interests. In the post-secondary institution, staff members

exchange information and ideas on their common environment and on the students with whom they work. Through these communications, staff members perceive the role expectations that their peer-group holds for each staff member and the degree to which each member is fulfilling the role expectations that are held for him, both socially and professionally. Satisfaction with communications with other staff members have an important influence upon staff role satisfaction.

Staff with students. The role satisfaction of staff members, when correlated with satisfaction felt with communications with students, gave a correlation of .453 ($p < .01$). One hundred eighty-three communications (31 percent) with students were recorded by the participating staff members. The role of the staff member depends upon the students for its very existence. The teacher may be more effective if he feels rapport with his students when teaching in the classroom and when interacting with the students out of the classroom. The satisfaction with his role that is felt by the staff member is influenced by the degree to which the students accept him and by the results he achieves through his efforts in teaching the students. The satisfaction that is experienced by the staff member with these communications has a very important influence upon his satisfaction with his role.

Staff with community. Eighty-nine instances (15 per cent) of communication episodes were recorded by the participating staff members with outside individuals and agencies. A correlation of .002 ($p \approx 0$) was found between these communications and the role

satisfaction of the staff members. The results indicate that although communications may be fairly frequent between staff members and the community, the satisfaction felt with such communications has no bearing upon the satisfaction that the staff member may feel with his role in the college. The president's communications with the community showed a strong correlation and it was speculated that such interactions are perceived by him to constitute part of his role as president. In the case of the staff member, it would appear that he regards the community as a separate entity with little or no influence upon his satisfaction with his role as a staff member.

Students with president. Participating students recorded only thirteen communication episodes with presidents, (< 1 per cent), in a total of almost fifteen hundred communications. The correlation between students role satisfaction and satisfaction with communications with presidents was found to be .005 ($p \approx 0$). Students do not appear to have very frequent personal interactions with the president of the college and interactions that do occur appear to have no influence upon the role satisfaction of the students. The presidents' satisfaction with role was found to be positively and significantly correlated with satisfaction with communications with students.

Students with staff. Five hundred and six communications were recorded by participating students with staff members (34 per cent). A correlation of .141 ($p \approx 0$) was found between the role satisfaction of students and their satisfaction with these communications with staff members. A higher correlation than this might have been anticipated since students spend a great deal of their college life

with staff members. However, the results indicate that students' satisfaction with communications with staff members do not have a significant effect upon their role satisfaction. The role satisfaction of staff members was found to be significantly correlated with their satisfaction with communications with students, but, as with the president, interactions with students influenced the staff and president to a greater extent than students were affected by such communications.

Students with students. Six hundred and forty-two (43 per cent) communications were recorded by participating students with other students. A correlation of .570 ($p < .01$) was found between the role satisfaction of students and their satisfaction with communications with other students. Students spend all of their academic life and much of their social life in the company of other students and there are frequent communications among them. These communications may affect the student's feeling of belonging to his society and his role in that society. The results indicate that satisfaction with communications with other students is very important to the role satisfaction felt by students. Non-significant correlations were found between students' role satisfaction and their satisfaction with communications with the presidents and with the staff. The three correlations reflect the strong influence of the peer-group, as compared with other groups, upon students.

Students and Community. Three hundred and thirty (22 per cent) communications with agencies and individuals outside the post-secondary institution were recorded by participating students. A

correlation of .35 ($p \approx 0$) was found between the role satisfaction of students and their satisfaction with communications with the community. The results indicate that students' role satisfaction is not significantly influenced by outside communications although such communications may be quite frequent. Perhaps students consider the relevant environment that exists outside the post-secondary institution to be in an entirely different world from that of the college, each with its own standards and expectations.

Summary

The related hypotheses suggested that there existed a significant positive correlation between the role satisfaction of groups of presidents, staff members, and students, as measured by the Questionnaires, and the satisfaction with communications of these groups with each other and with the community, as measured by Item Six of the Communication Record Form.

Seven of the eleven hypotheses showed a significant positive correlation, and the research hypothesis was accepted in each of these cases. In the four remaining hypotheses a positive and significant correlation was not found and the research hypothesis was rejected in each of these cases. In brief:

Accepted hypotheses: - president with staff

president with students

president with community

staff with president

staff with staff

staff with students

students with students

Rejected hypotheses: - staff with community

students with president

students with staff

students with community.

The results of the correlations that were found in the analysis of the related hypotheses indicate three main findings between satisfaction with role and satisfaction with communications:

(a) the president of the post-secondary institution is affected by communication interactions with all groups within his college and by its relevant environment. That is, the president's role satisfaction is related to his satisfaction with communications with all groups within and outside the college.

(b) the role satisfaction of staff members appears to be related to satisfaction with communications within the college but not outside the college.

(c) the role satisfaction of students, according to the results found in this study, is significantly related to satisfaction with communications with other students. Non-significant correlations were found with other groups.

IV. ANALYSIS OF THE QUESTIONNAIRES

The Staff Questionnaire

A description of methods that were used to establish the

stability, face validity, content validity, and construct validity of the questionnaires will be found in the report of the pilot study in Appendix D.

The Staff Questionnaire consisted of twenty three items, each of which asked the respondent for a reaction on a seven-point scale from "satisfied" to "dissatisfied"; two of the items asked directly for satisfaction with communications in the college. The remaining twenty-one items purported to measure satisfaction with seven factors that have been recognized by researchers as affecting the role satisfaction of an individual (supra., p. 48). These factors were: (a) content of work; (b) organization and administration; (c) salary and other benefits; (d) coworkers; (e) opportunity for advancement; (f) working conditions; and, (g) supervision.

The questionnaire was designed so that each of the seven factors was represented by three items, as follows:

(a) content of work:	Items 1, 4, 18
(b) organization and administration:	Items 5, 9, 16
(c) salary and other benefits:	Items 3, 17, 21
(d) coworkers:	Items 8, 19, 20
(e) opportunity for advancement:	Items 2, 10, 11
(f) working conditions:	Items 7, 14, 15
(g) supervision:	Items 6, 12, 13.

Reliability. (Internal consistency). The internal consistency of the questionnaire was established by calculating the correlations between items in the same factor. Table IV shows the

correlations between these sub-scale items and other sub-scale items.

TABLE IV
CORRELATIONS BETWEEN SUB-SCALE ITEMS

Factor	Items	r	Items	r	Items	r
Organization and admin.	5, 9	.342*	9, 16	.391	5, 16	.463
Salary and other benefits	3, 17	.795	17, 21	.585	3, 21	.549
Coworkers	8, 19	.440	19, 20	.450	8, 20	.686
Advancement	2, 10	.715	10, 11	.603	2, 11	.718
Supervision	6, 12	.741	12, 13	.694	6, 13	.640
Working conditions	7, 14	.368	14, 15	.342*	7, 15	.628
Content of work	1, 4	.782	4, 8	.507	1, 8	.652

* not significant at the .01 level (.354)

The correlations between within-factor items indicate a high degree of internal consistency.

Validity. (Factor analysis). A factor analysis computer program was used to identify items which cluster under certain factors. The program called for seven factors, which successive rotations reduced to three.

Extensive use of electronic computers in factor analysis has led researchers to recommend that the number of factors accepted should be equal to the number of eigenvalues greater than one.² The factor

²H. Harman, Modern Factor Analysis. Chicago, University of Chicago Press, 1960, p. 363.

analysis of the Staff Questionnaire produced five eigenvalues greater than one and revealed that items on the questionnaire tended to cluster under five factors: (a) organization and administration; (b) salary and other benefits; (c) coworkers; (d) advancement; and, (e) supervision.

Table V shows the factors, the items representing those factors, the loadings of those items, and the percentage of total variance after three rotations. Those items with factor loadings of less than .500 were deleted from further analysis, and factors with fewer than two items with factor loadings of at least .500 were deleted. On these bases, Item Five was rejected as were the factors concerning working conditions and content of work.

The factor analysis was conducted on the staff questionnaire in order to identify factors that contribute to role satisfaction. These factors were then correlated with communication satisfaction. That is, the scores of participating staff members on the items representing the identified factors on the questionnaire were correlated with their scores on the Communication Record Forms.

Correlations Between Role Satisfaction Factors and Communication Satisfaction

A Pearson product-moment correlation computer program was used to calculate correlations between factor satisfaction scores (as measured by the staff questionnaire on item-clusters of the questionnaire that had been identified in the factor analysis) and communication satisfaction scores (as measured by Item Six of the

TABLE V
FACTOR LOADINGS OF ITEMS

Factor	Items	Loading	Percentage of Total Variance
Organization and Administration	5	.490*	
	9	.656	
	16	.747	9.522
Salary and Other Benefits	3	.869	
	17	.884	
	21	.752	17.800
Coworkers	8	.898	
	19	.552	
	20	.802	14.170
Opportunity for Advancement	2	.888	
	10	.738	
	11	.848	14.053
Supervision	6	.771	
	12	.828	
	13	.845	21.550
Conditions of Work*	7	.403*	
	14	.064*	
	15	.590	2 rotations
Content of Work*	1	.589	
	4	.375*	
	8	.105*	1 rotation

* deleted

Communication Record Form).

Table VI shows the correlation that resulted between role satisfaction factors and communication satisfaction.

The findings would seem to indicate that some factors affect the role satisfaction of an individual to a greater extent than do other factors. The following discussion does not intend to suggest that the factors analysed are the only factors that may affect the role satisfaction of the individual. Two of the items on the questionnaire asked the respondent to assess his satisfaction with communications. This factor appears in Table VI.

TABLE VI
CORRELATIONS BETWEEN SATISFACTION
FACTORS AND COMMUNICATION SATISFACTION

Factor	Items	Correlation With Communication Satisfaction
Organization and Administration	9, 16	.415*
Salary and other Benefits	3, 17, 21	.203
Coworkers	8, 19, 20	.786*
Opportunity for Advancement	2, 10, 11	.255
Supervision	6, 12, 13	.691*
Communications	22, 23	.948*

* $p < .01$

Discussion of Correlations

Organization and administration. Items 5, 9, and 16 of the Staff Questionnaire were designed to measure the degree of satisfaction with the organization and administration of the post-secondary institution on the part of staff members. Item 5 was dropped from the factor cluster since it showed a loading of less than .500. The correlation of .415 ($p < .01$) that was found between satisfaction with the organization and administration factor and satisfaction with communications in the post-secondary institution indicates that staff members perceive their satisfaction with organization and administration as being significantly influenced by their satisfaction with communications. The organization cannot be operated, nor can it be administered, without communications.

Salary and other benefits. Items 3, 17, and 21 of the Staff Questionnaire were designed to disclose the degree to which staff members were satisfied with salary and other benefits that are inherent in their positions. A correlation of .203 ($p \approx 0$) was found between staff satisfaction with pay and other benefits, and satisfaction with communications.

Coworkers. Items 8, 19, and 20 were designed to find the satisfaction felt by staff members with their coworkers. A correlation of .786 ($p < .01$) was found between staff satisfaction with their coworkers and staff satisfaction with communications. Faculty members spend a great deal of time with each other and the degree to which they enjoy rapport with each other and share compatible ideas will naturally affect their satisfaction with their role. Communications

are an integral part of these interactions among staff members and it might have been expected that a significant correlation should exist between satisfaction with coworkers and satisfaction with communications.

Opportunity for advancement. Items 2, 10, and 11 of the Staff Questionnaire purported to elicit feelings of satisfaction of staff for their opportunities for professional advancement. A correlation of .255 ($p \sim 0$) was found between the satisfaction with communications of staff members and their satisfaction with opportunities for advancement. This is not a significant correlation and it may be concluded that satisfaction with communications has little effect upon their satisfaction with opportunities for advancement. A staff member may perceive his advancement opportunities in the light of promotion and recognition, which would presumably involve satisfying communications. However, the data that were gathered in this study did not include such communications.

Supervision. Items 6, 12, and 13 of the Staff Questionnaire were designed to assess the degree of satisfaction felt by staff members with the supervision in the post-secondary institution. A correlation of .691 ($p < .01$) was found between staff satisfaction with communications and satisfaction with the supervision in the college. Teachers generally feel that supervision is desirable in an educational institution, not necessarily a strict and restrictive bureaucracy, but rather supervisory policies and behaviors that prevent anarchy through reasonable rules and regulations for staff and for students. Supervision in the post-secondary institution, and in

any organization, can only be operationalized through communications. The results indicate that staff members perceive their satisfaction with supervision as related to their satisfaction with communications.

Communications. Items 22 and 23 of the Staff Questionnaire simply asked the respondents to assess their satisfaction with communications in the institution. The questions asked the degree of satisfaction with the amount of communications and satisfaction that one's communications were understood by others. A correlation of .948 ($p < .01$) was found between staff satisfaction with communications as measured by the Communication Record Forms, and communications as a factor in the staff questionnaire. The extremely high correlation that was calculated between these two variables was hardly unexpected since both measure satisfaction with communications, although the data came from different instruments.

Summary

The satisfaction felt by staff members with the five factors that were identified by the factor analysis of the questionnaire were correlated with the staff satisfaction felt with communications as measured by the Communication Record Forms. Factors concerning organization and administration, coworkers, and supervision gave significant positive correlations beyond the .01 level of confidence. Those factors concerned with salary and other benefits, and opportunities for advancement did not yield a significant correlation. The conclusion may be drawn that those factors which are of a personal nature and deal with human relations, in the post-secondary institution, have a more direct bearing upon satisfaction with communications than

do those factors of a more impersonal nature.

The President Questionnaire

The presidents' questionnaire was virtually the same as the staff questionnaire with a few minor changes in phraseology; the same items evoked satisfaction with the same factors felt by presidents as felt by staff. Since only five presidents were involved in the study, it was not possible to perform a factor analysis on the twenty-one items of the presidents' questionnaire. However, since the staff questionnaire and the president questionnaire are so similar, including the numbering of items, the items that were identified as clustering under certain factors in the factor analysis of the staff questionnaire were also used in the calculations of correlations between the satisfaction of presidents with communications and their satisfaction with the identified factors on the president questionnaire.

Correlations Between Factors and Communication Satisfaction.

A Pearson product-moment computer program was used to calculate correlations between factor satisfaction scores (as measured by responses to the president questionnaire on items on item clusters that had been identified in the factor analysis) and communication satisfaction scores (as measured by Item Six of the Communication Record Form).

Table VII shows the correlation coefficients that were found in this analysis. Items Twenty-two and Twenty-three that appear in the Communications factor simply asked the president to assess his satisfaction with communications in the college.

TABLE VII
CORRELATIONS BETWEEN SATISFACTION BY
FACTORS AND COMMUNICATION SATISFACTION

Factor	Items	Correlation With Communication Satisfaction
Organization and Administration	9, 16	.425
Salary and other Benefits	3, 17, 21	.828*
Coworkers	8, 19, 20	.777*
Opportunity for Advancement	2, 10, 11	.281
Supervision	6, 12, 13	.000
Communications	22, 23	.968**

*p < .05

**p < .01

Discussion of Correlations

Organization and administration. Items 5, 9, and 16 of the presidents' questionnaire were designed to determine the degree to which the president was satisfied with the organization and its administration. Item Five was dropped from the factor cluster since it showed a loading of less than .500 on the factor analysis. The correlation of .425 ($p \approx 0$) that was found between satisfaction with the organization and administration factor and satisfaction with communications in the post-secondary institution suggests that

presidents do not perceive their satisfaction with organization and administration as being related significantly to their satisfaction with communications. The sample of presidents was very small, five in number, and a high correlation coefficient is required for significance.

Salary and other benefits. Items 3, 17, and 21 of the president questionnaire were designed to disclose the degree to which presidents were satisfied with salary and other benefits that may be connected with their position. A correlation coefficient of .828 ($p < .05$) was found between presidents' satisfaction with communications and satisfaction with salary and other benefits.

Coworkers. Items 8, 19, and 20 of the president questionnaire were designed to find the satisfaction felt by presidents with their coworkers. A correlation coefficient of .777 ($p < .05$) was found between presidents' satisfaction with communications and their satisfaction with coworkers. The president administers the college through his staff, with whom he must work in close cooperation and with mutual respect. The staff and the president communicate with each other frequently and the president's satisfaction with these communications may be expected to have a bearing upon his satisfaction with his coworkers. The correlation of .777 indicates that the president's satisfaction with communications is related to his satisfaction with his coworkers.

Opportunity for advancement. Items 2, 10, and 11 of the presidents questionnaire were designed to elicit the satisfaction of the president with his opportunities for professional advancement. A

correlation of .281 ($p \approx 0$) was found between the satisfaction of presidents with communications and their satisfaction with opportunities for advancement. This is not a significant correlation coefficient and it may be concluded that the president's satisfaction with communications is not related to his satisfaction with advancement opportunities. A president cannot advance in the post-secondary institution because he is at the top of the hierarchy and therefore may perceive few opportunities for advancement.

Supervision. Items 6, 12, and 13 of the president questionnaire were designed to assess the degree of satisfaction felt by presidents with the supervision of the college. A correlation coefficient of .00 ($p = 0$) was found between the president's satisfaction with supervision and his satisfaction with communications. A higher correlation than zero was anticipated (in spite of the small number of presidents) between the two variables since supervision does take place in the post-secondary institution and it takes place through communications. Possibly, the president and his staff set policies and rules and regulations, but the administration of the supervision of students and staff members is carried out by the administrative staff members, while the president attends to other administrative details and has little connection with actual supervision.

Communications. Items 22, and 23 of the president questionnaire simply asked the president to assess his satisfaction with communications in the college as far as the amount of communications and the extent to which he perceived his communications

to be understood by others. A correlation of .968 ($p < .01$) was found between the satisfaction of presidents with communications, as measured by the Communication Record Forms, and communications as a factor on the president questionnaire. The extremely high correlation coefficient that was calculated between the two variables was anticipated since both measure satisfaction with communications although the data were from different sources.

Summary

The five factors that were identified in the factor analysis of the staff questionnaire were also used in the calculation of correlation coefficients between the same factors from the president questionnaire and the presidents' satisfaction with communications. There were only five participating presidents and this small number does not lend itself to a factor analysis of a questionnaire consisting of twenty-six items. The items on the president questionnaire were very similar to those on the staff questionnaire, including the numbering of the items.

Because the number of participating presidents was small, a high correlation coefficient was required for significance. Only three of the six correlations were found to be significant, two at the .05 and one at the .01 levels of confidence. The high correlation between presidents' satisfaction with communications, as measured by Items 22 and 23 of the president questionnaire, and satisfaction with communications as measured by the Communication Record Form was anticipated. The high correlation between the president's satisfaction with communications and his satisfaction with his coworkers may be the

most meaningful of the correlations that were calculated. If this is the case, it may suggest that personal factors are of prime importance to a president's satisfaction with communications in the post-secondary institution.

The Student Questionnaire

The student questionnaire consisted of twenty-three items, each of which asked the respondent for a reaction on a seven-point scale from "satisfied" to "dissatisfied." Two of the items asked for satisfaction with communications in the college and the remaining twenty-one items purported to determine satisfaction with seven factors that have been recognized as affecting the role satisfaction of an individual (supra., p. 69). These factors were: (a) content of work; (b) organization and administration; (c) salary and other benefits; (d) coworkers; (e) opportunity for advancement; (f) working conditions; and, (g) supervision.

The student questionnaire was designed so that each of the factors was represented by three items, as follows:

(a) organization and administration:	Items 4, 7, 12
(b) salary and other benefits:	Items 3, 9, 17
(c) supervision:	Items 15, 18, 19
(d) content of work:	Items 10, 14, 22
(e) coworkers:	Items 5, 8, 20
(f) working conditions:	Items 2, 13, 16
(g) opportunity for advancement:	Items 1, 6, 11

Reliability. (Internal consistency). The internal consistency of the students questionnaire was established by correlating the correlation coefficients between items that represent the same factor. Table VIII shows the correlations between these sub-scale items and other sub-scale items.

TABLE VIII
CORRELATIONS BETWEEN SUB-SCALE ITEMS

Factor	Items	r	Items	r	Items	r
Organization and Administration	4, 7	.723	7, 12	.582	4, 12	.770
Salary and Other Benefits	3, 9	.364	9, 17	.346	3, 17	.898
Supervision	15, 18	.734	18, 19	.579	15, 19	.493
Content of Work	10, 14	.407	14, 22	.652	10, 22	.440
Coworkers	5, 8	.395	8, 20	.191*	5, 20	.391
Working Conditions	2, 13	.530	13, 16	.317	2, 16	.270*
Opportunities for Advancement	1, 6	.310	6, 11	.309	1, 11	.310

* not significant at the .01 level (.283)

The correlations between sub-scale items show a high degree of internal consistency.

Validity. (factor analysis). A factor analysis computer program was used to identify items which clustered under certain factors. The program called for seven factors which successive

rotations reduced to three. The factor analysis revealed that the items clustered under six factors.

Table IX shows the six factors, the loadings of the items representing the factors, and the percentage of total variance after two rotations. Those items with factor loadings of less than .500 were deleted from further analyses, and factors with fewer than two items with loadings of at least .500 were also deleted. On these bases, Items Ten and Twenty were rejected, as was the factor concerning opportunities for advancement.

The factor analysis was conducted in order to identify factors in the student questionnaire that would be used in conjunction with communication satisfaction scores for the calculation of correlation coefficients.

Correlations Between Factors and Communication Satisfaction

A Pearson product-moment computer program was used to calculate correlation coefficients between factor satisfaction scores (as measured by the student questionnaire on item clusters that had been identified in the factor analysis) and communication satisfaction (as measured by Item Six of the Communication Record Form).

Table X shows the correlations between factor satisfaction and communication satisfaction. Items 21 and 23 simply asked the respondent his satisfaction with communications in the college. The findings indicate that some factors in role satisfaction show a higher correlation with communication satisfaction than do other factors.

TABLE IX
FACTOR LOADINGS OF ITEMS

Factor	Items	Loading	Percentage of Total Variance
Organization and Administration	4	.898	21.034
	7	.779	
	12	.741	
Salary and Other Benefits	3	.851	13.446
	9	.672	
	17	.851	
Supervision	15	.815	12.029
	18	.897	
	19	.628	
Content of Work	10	.460*	10.838
	14	.695	
	22	.896	
Coworkers	5	.749	9.688
	8	.792	
	20	.426*	
Conditions of Work	2	.695	8.021
	13	.529	
	16	.795	
Opportunity for Advancement*	1	.339*	1 rotation
	6	.457*	
	11	.898	

* deleted

TABLE X
CORRELATIONS BETWEEN SATISFACTION BY
FACTORS AND COMMUNICATION SATISFACTION

Factor	Items	Correlation With Communication Satisfaction
Organization and Administration	4, 7, 12	.826*
Salary and Other Benefits	3, 9, 17	.736*
Supervision	15, 18, 19	.592*
Content of Work	14, 22	.908*
Coworkers	5, 8	.664*
Conditions of Work	2, 13, 16	.313*
Communications	21, 23	.916*

* $p < .01$

The following discussion does not intend to suggest that the factors that were analysed are the only factors that may affect the role satisfaction of an individual and his satisfaction with communications.

Discussion of Correlations

Organization and administration. Items 4, 7, and 12 were designed to measure the satisfaction felt by students with the organization and administration of the post-secondary institution.

A correlation coefficient of .826 ($p < .01$) was found between students' satisfaction with the organization and administration factor and satisfaction with communications. This result would indicate that students perceive their satisfaction with the organization and administration of the institution as being significantly related to their satisfaction with communications. The organization of the college and its administration is conducted by means of communications.

Salary and other benefits. Although this factor was designated "salary and other benefits" it should not be inferred that students receive a salary from the college, rather, this factor examines the satisfaction of the student with his financial security and other benefits that may accrue to him as a student. Items 3, 9, and 17 of the student questionnaire were designed to disclose the degree to which a student was satisfied with his financial position and other benefits that he may perceive from the college. The correlation coefficient of .736 ($p < .01$) that was found between a student's satisfaction with communications and satisfaction with financial status and benefits indicates that one variable may be related to the other.

Supervision. Items 15, 18, and 19 of the student questionnaire were designed to find the satisfaction felt by students with the supervision in the post-secondary institution. A correlation coefficient of .592 ($p < .01$) was found between students' satisfaction with supervision and students' satisfaction with communications. Students may feel that a degree of supervision is necessary in an educational institution, not a cold bureaucracy but supervisory policies and

practices that prevent anarchy through reasonable rules and the administration of these rules, for staff and students. Supervision in the post-secondary institution can only be carried out by means of communications. The results indicate that student satisfaction with supervision is related to satisfaction with communications, some of which are concerned with supervision.

Content of work. Items 10, 14, and 22 were designed to assess the degree to which students were satisfied with the content of the work in which they were engaged. Item Ten was dropped from this factor since it had a factor loading of less than .500. A correlation coefficient of .908 ($p < .01$) was found between student satisfaction with the content of work and satisfaction with communications. The content of the work that the student performs (his studies) is of very great importance to him as a means to an end since, presumably, he is in the college to further his education and enhance his chances for gaining useful employment. The content of his work is revealed to him through communications with his teachers and mentors and he perceives his satisfaction with the content of his work as related to his satisfaction with communications.

Coworkers. Items 5, 8, and 20 of the student questionnaire were designed to find the satisfaction felt by students with their coworkers. Item Twenty was deleted from this factor since it had a factor loading of less than .500. A correlation coefficient of .664 ($p < .01$) was found between student satisfaction with communications and satisfaction with coworkers. Students spend most of their academic and social lives in the company of other students and the degree to

which they enjoy student society and the exchange of ideas within this society may affect their satisfaction with their role as students. Communications are the basis of these student interactions; the significant positive correlation that was found between student satisfaction with costudents and student satisfaction with communications suggests that one variable is related to the other. This correlation may be compared with the correlation between student role satisfaction and student satisfaction with communications with other groups; the students-with-students group was the only significant correlation that was found (supra., p. 82).

Conditions of work. Items 2, 13, and 16 of the student questionnaire were designed to elicit the degree to which students were satisfied with their working conditions. A correlation of .313 ($p < .01$) was found between student satisfaction with conditions of work and students satisfaction with communications. Although this correlation coefficient is positive and significant beyond the .01 level of confidence, it was the lowest in the series involving students. Conditions are part of the physical environment of the college and certain physical conditions and designs of buildings are more conducive to communications than are others. The correlation that was found suggests that student satisfaction with communications is related to satisfaction with working conditions.

Communications. Items 21 and 23 of the student questionnaire asked the respondent to assess the degree to which he was satisfied with communications in the institution as to amount of communications and the degree to which he perceived his communications with others to

be understood by them. A correlation coefficient of .916 ($p < .01$) was found between the satisfaction of students with communications as a factor on the students' questionnaire and satisfaction with communications as measured by Item Six of the Communication Record Form. The extremely high correlation that was calculated between the two variables was not unexpected since they both measure satisfaction with communications, although the data came from different instruments.

Summary.

The six factors that were identified in the factor analysis of the student questionnaire were each correlated with student satisfaction with communications as measured by the Communication Record Forms. Each of the six correlations showed a positive and significant result beyond the .01 level of confidence. The highest correlation (excluding the communication factor) was found to be between the content of work factor and satisfaction with communications, while the lowest correlation concerned the conditions of work factor.

Conclusion

Perception of the content of work depends upon the manner in which it is interpreted to the student and the extent to which he accepts the interpretation, which involves personal interactions and communications between individuals. Conditions of work involve the physical plant and do not depend upon human interactions.

The above analyses of the president, staff, and student questionnaires and the subsequent correlations that were calculated between identified factors in the questionnaires and communication

satisfaction lead to the conclusion that, generally, there is a high positive correlation between satisfaction with communications and those factors that involve human interactions, such as coworkers, supervision, and organization and administration.

One correlation coefficient was found to be positively significant and common to the three groups, that involving coworkers. The conclusion may be drawn that, since communications are an integral part of the life of the post-secondary institution, and since compatibility with coworkers is an important factor in role satisfaction, communications with coworkers influences the role satisfaction of an individual at any level in the post-secondary institution.

V. ANALYSIS OF THE COMMUNICATION RECORD FORM

Frequencies of Responses

The Communication Record Form was designed to determine frequencies of communications in the post-secondary institution, with whom such communications took place, the reason for the communication, the satisfaction felt with the communication, and other details as shown in Appendix A.

Respondents were issued with twenty forms each and were requested to use one form for each communication in which they participated during a period of five days. Generally, individuals participate in some 1500 communications each day, and it was not assumed that the twenty forms would include all communications during

the period of the study. However, it was expected that twenty forms would yield a fairly clear picture of communications frequencies and patterns, at least as far as the sample was concerned.

Subjects were asked to record information in the following categories on each communication: (1) Type of contact (letter or memo, group or individual, telephone, oral, written, or other); (2) Position of other person (president, staff, student, or other); (3) Contact initiated by self or other; (4) Type of activity (administration, instruction, discipline, public relations, curriculum, other); (5) Purpose of episode (giving or receiving information, giving or receiving instruction); (6) Satisfaction felt with the communication (on a ten-dimension seven-point scale); and, (7) A formal or informal communication.

Table XI shows the number of participants in the study and the number of completed Communication Record Forms that were received from each group. Each of the five presidents submitted the requested twenty forms; the overall average number from all groups was sixteen.

TABLE XI
COMPLETED FORMS RECEIVED

Group	N	No. of Forms Submitted	Average
Presidents	5	100	20
Staff	50	625	12.5
Students	82	1458	17.8
Total	137	2183	16

Respondents were asked to check all items on the form that applied to the communication. Naturally, more than one item in some categories were checked. Table XII shows the frequencies of items in categories.

TABLE XII
FREQUENCIES OF ITEMS IN CATEGORIES

Category	Presidents f	Staff f	Students f
1. Type of Contact	143	808	1688
2. Position of Other	106	585	1491
3. Initiated by	100	625	1458
4. Type of Activity	139	679	1398
5. Purpose	184	736	1793
6. Satisfaction	100	625	1458
7. Formal/Informal	100	625	1458
TOTALS	872	4683	10744

All forms received were checked at least once in each category. The following tables indicate the frequencies and percentages of items within categories. Table XIII shows the frequencies and percentages of different types of contacts that were reported. A contact could be, for instance, a letter or memo, written, to an individual, in which case three checkmarks would appear for the contact. The data reveal that oral individual contacts were the most

frequent at each level.

TABLE XIII
FREQUENCIES OF TYPES OF CONTACTS

1. Type of Contact	President		Staff		Students	
	f	%	f	%	f	%
Letter or memo	21	14.7	58	7.2	123	7.4
Group contact	26	18.2	129	16.0	306	18.3
Individual contact	28	19.6	260	32.2	450	25.9
Telephone	21	14.7	109	13.5	301	17.9
Oral	32	22.4	230	28.4	432	25.7
Written	15	10.5	22	2.7	75	4.6
Other	0	0	0	0	1	.06
	143		808		1688	

Respondents were not requested to record certain types of contacts and it is possible that, since the oral individual type occurred most frequently, that it may also be the preferred type.

Table XIV shows the position of the person with whom the communication was made, and the frequency and percentage of these contacts. The results indicate that, according to the data that were gathered in this study, presidents communicate more frequently with outside agencies and individuals than they communicate with the groups within the post-secondary institution; that staff contact other staff members most frequently and that students communicate most frequently

with other students.

TABLE XIV
FREQUENCIES AND POSITIONS OF CONTACTS

2. Other Person	President		Staff		Students	
	f	%	f	%	f	%
President	0	0	24	4.1	13	.9
Staff	40	38.0	289	49.5	506	34.1
Students	15	14.3	183	31.2	642	43.1
Other	50	47.5	89	15.2	330	22.1
TOTALS	105		585		1491	

Table XV shows the frequencies and percentages of self-initiated and other-initiated communications of presidents, staff, and students. Presidents and students appear to record significantly more communications that are self-initiated than other-initiated while staff members recorded slightly more other-initiated contacts. The frequencies shown in the table reflect the communications that were recorded during the study; the differences between self- and other-initiated communications are not great and it is possible that in the post-secondary institution the number of communications are fairly equally divided between self- and other-initiated.

TABLE XV
FREQUENCIES OF INITIATORS

3. Contact Initiated By:	President		Staff		Students	
	f	%	f	%	f	%
Self	54	54.0	309	49.5	789	54.1
Other	46	46.0	316	50.5	669	45.9
.....TOTALS	100		625		1458	

The fourth category concerned the type of activity that the communication involved. Table XVI shows the type of activity, its frequency, and the percentage of that type. The results indicate that presidents participate in administrative communications more than any other type. This result may have been anticipated since the president's role is primarily administrative. Staff and students recorded instructional communications most frequently. In all cases the disciplinary activity was the least frequently mentioned. Perhaps department of students is not a problem in the post-secondary institution. The activities in the "other" item included such matters as staff meetings, purchases, consultations, and social activities.

The fifth category of the Communication Record Form concerned the purpose of the communication. Table XVII shows the frequencies of purposes and their percentages. The results reveal that presidents and staff members participate in more giving information episodes than in receiving information episodes and in more giving

TABLE XVI
FREQUENCIES OF TYPES OF ACTIVITIES

4. Type of Activity	President		Staff		Students	
	f	%	f	%	f	%
Administration	58	41.7	153	22.6	122	8.8
Instruction	8	5.7	168	24.8	401	28.8
Discipline	6	4.3	21	3.1	29	2.1
Public Relations	21	15.1	74	10.9	356	25.4
Curriculum	19	13.6	135	19.8	287	20.5
Other	27	19.4	128	18.8	203	14.5
TOTALS	139		679		1398	

instruction episodes than in receiving instruction episodes. Students appear to engage in more reception of information and instruction than in giving information and instruction. These results may have been anticipated since it is generally accepted that the student's role is to receive instruction and information while the role of the faculty is to give instruction and impart information.

The sixth category concerned the assessment by the respondent of his satisfaction with each communication. The data from this category were used in the analyses that have already been discussed and in those later in this chapter.

The seventh, and final, category on the form asked the respondent if the communication was formal or informal. Table XVIII

TABLE XVII
FREQUENCIES OF PURPOSES OF EPISODES

5. Purpose of Episode	President		Staff		Students	
	f	%	f	%	f	%
Giving Information	84	45.5	338	46.0	642	35.8
Receiving Information	71	38.6	278	37.8	703	39.2
Giving Instruction	24	13.0	102	13.9	184	10.3
Receiving Instruction	5	2.7	18	2.5	264	14.7
TOTALS		184	736		1793	

shows the frequencies and percentages of formal and informal contacts. Each of the groups participated in more informal than formal communications. An interesting explanatory note was received from one college to the effect that initial communications are frequently informal but may be formalised later in official or directive form.

TABLE XVIII
FREQUENCIES OF FORMAL AND INFORMAL EPISODES

7.	Presidents		Staff		Students	
	f	%	f	%	f	%
Formal	49	49.0	309	49.5	615	42.2
Informal	51	51.0	316	50.5	843	57.8
TOTALS		100	625		1458	

Summary

Tables XI to XVIII show the frequencies and percentages of responses to the Communication Record Form from presidents, staff and students in the post-secondary institutions that participated in the study. All groups recorded more oral and individual contacts than any other types; presidents reported that most of their contacts were with outside agencies and individuals, while staff members recorded the greatest number of communications were with other staff members and students recorded their most frequent communications as being with other students. Presidents and students recorded that most of their communications were self-initiated while staff members recorded slightly more other-initiated communications. Staff members and students reported that most of their contacts concerned instructional activities and presidents' communications were mostly involved with administrative activities. Presidents and staff recorded the giving of information as the most frequent purpose compared with the students' highest frequency being receiving information. Presidents and staff members also recorded more giving of instruction episodes than receiving instruction episodes while students recorded more receiving than giving. All groups recorded more informal communications than formal communications.

Satisfaction with Communications

The sixth category on the Communication Record Form required respondents to assess the degree to which they felt satisfaction with each communication. This was accomplished by the use of ten continua ranging from "good" to "bad" on a seven-point scale. This scale was

used to determine the respondent's satisfaction with all communications and also his satisfaction with particular communications. That is, the respondent's average satisfaction with communications score was calculated from all the forms he submitted and the score was used in the previously discussed analyses and correlations; the following analyses are concerned with the satisfaction felt for particular communication episodes, by presidents, staff and students.

In each of the following tables, the maximum possible satisfaction score is 7 and the minimum is one. Thus, the satisfaction score shows the relative satisfaction with the communications compared with perfect satisfaction. Table XIX shows the satisfaction of presidents with communications with groups of staff, students, and outside agencies, when self-initiated or other-initiated.

The results indicate that presidents find relatively most satisfaction in their dealings with staff members and least satisfaction in their dealings with outside agencies.

TABLE XIX
PRESIDENT SATISFACTION WITH COMMUNICATIONS
WITH OTHER GROUPS

President Satisfaction With:	Staff	Students	Outside Agencies
All communications	6.1	6.0	5.9
Self-initiated	6.3	6.0	5.9
Other-initiated	6.0	5.7	5.6

Table XX shows the relative satisfaction of the president with self-initiated and other-initiated communications and his satisfaction with formal and informal communications. Apparently, the president prefers self-initiated and informal communications.

TABLE XX
PRESIDENT SATISFACTION WITH COMMUNICATIONS
BY INITIATOR AND FORMALITY

Type of Communications	Satisfaction
Self-initiated	6.1
Other-initiated	5.8
Informal	6.2
Formal	5.3

Staff members showed a tendency to prefer those communications with outside agencies to other groups from within the college. This is interesting since a non-significant correlation was calculated between staff role satisfaction and communications with outside agencies. Table XXI shows staff satisfaction with communications with other groups.

Staff members also showed a relative preference for those communications that are self-initiated to those that are other-initiated and that they prefer informal communications to formal communications. Table XXII shows staff satisfaction by initiator and formality of

TABLE XXI
STAFF SATISFACTION WITH COMMUNICATIONS
WITH OTHER GROUPS

Staff Satisfaction With:	President	Staff	Students	Outside Agencies
All communications	5.5	5.9	6.1	6.6
Self-initiated	6.0	6.2	6.2	6.9
Other-initiated	5.3	5.8	6.0	6.5

TABLE XXII
STAFF SATISFACTION WITH COMMUNICATIONS
BY INITIATOR AND FORMALITY

Type of Communication	Satisfaction
Self-initiated	6.5
Other-initiated	5.9
Informal	6.5
Formal	6.2

communications.

Students indicated that their preference was for communications with other students, followed by a preference for communications with the president. Table XXIII shows relative student satisfaction with

communications with other groups.

TABLE XXIII
STUDENT SATISFACTION WITH COMMUNICATIONS
WITH OTHER GROUPS

Student Satisfaction With:	President	Staff	Students	Outside Agencies
All communications	5.4	4.8	5.8	4.9
Self-initiated	5.7	5.5	5.9	5.6
Other-initiated	5.0	4.6	5.7	4.5

Table XXIV indicates student satisfaction with the initiator of communications and satisfaction with formality and informality. Students appear to prefer self-initiated and informal communications.

TABLE XXIV
STUDENT SATISFACTION WITH COMMUNICATIONS
BY INITIATOR AND FORMALITY

Type of Communication	Satisfaction
Self-initiated	5.7
Other-initiated	4.9
Informal	5.1
Formal	4.9

Discussion. The foregoing tables indicate that all groups were relatively more satisfied with self-initiated communications than with other-initiated communications. All groups were also relatively more satisfied with informal communications than with formal communications. According to the data, presidents were most satisfied with communications with staff members, students were most satisfied with contacts with other students, and staff members indicated highest satisfaction with agencies and individuals outside the college, such as businessmen, guest speaking, service groups and children's clubs. Each of the results only suggests a relative satisfaction within the group; staff satisfaction with communications with students was not being compared with presidents' satisfaction with communications with students, but rather, staff satisfaction with communications with students was compared with staff satisfaction with communications with presidents.

The Communication Record Forms were further analysed to determine the satisfaction felt by groups within categories 1, 4, and 5, that is, those categories concerning type of contact, type of activity, and purpose of episode. Table XXV shows the relative satisfaction felt by groups with items in the first category which concerned the type of contact.

The results shown in Table XXV indicate that each group prefers oral and individual communications. The suggestion was made earlier that since oral and individual contacts were the most frequently mentioned by each group, perhaps they were also preferred.

These results seem to support the suggestion; the use of the telephone also is relatively satisfying as a means of communicating with individuals orally.

TABLE XXV
SATISFACTION WITH TYPE OF CONTACT
BY GROUPS

1. Type of Contact	President	Staff	Students
Letter or memo	5.3	5.7	5.0
Group contact	5.5	5.5	5.1
Individual contact	6.1	5.9	6.0
Telephone	6.0	5.9	5.3
Oral	6.2	6.2	5.5
Written	5.3	5.7	5.0

The fourth category concerned the type of activity that called for the communication. Table XXVI shows that students and presidents each found communications involving discipline to be the least preferred type of activity while students and staff found curriculum activities to be the most preferred. No determination of the amount of involvement on the part of students and staff was made into curriculum planning and programming procedures. If staff and students are involved in this function in the college, it may account for their relatively high satisfaction with curriculum matters.

Table XXVI shows relative group satisfaction with the different types of activity.

TABLE XXVI
SATISFACTION WITH TYPE OF ACTIVITY
BY GROUPS

4. Type of Activity	President	Staff	Student
Administration	5.9	5.7	5.0
Instruction	6.9	5.8	4.8
Discipline	5.4	6.0	4.6
Public relations	5.5	6.0	5.0
Curriculum	5.5	6.7	5.4

Table XXVII shows the relative satisfaction felt by groups with the category concerning the purpose for the communication. The groups display no common feeling towards the category. Presidents apparently prefer receiving information only a little more than giving information/instruction, while receiving instruction is lower in satisfaction. Staff members gain most satisfaction from giving information and instruction. According to the data, students gain most satisfaction from receiving instruction, compared with the other possibilities in this category.

Table XXVII shows the relative satisfaction felt by groups with the purpose of the episode.

TABLE XXVII
SATISFACTION WITH PURPOSE OF EPISODE
BY GROUPS

5. Purpose of Episode	President	Staff	Students
Giving information	5.8	6.0	5.3
Receiving information	5.9	5.9	5.3
Giving instruction	5.8	6.0	5.2
Receiving instruction	5.0	5.2	5.6

Discussion. Tables XXV to XXVII indicate that presidents, staff members, and students are more satisfied with individual oral contacts than with other types. Table XIII revealed that these types of contact are also the most frequent. The results indicate that presidents and students do not find communications connected with discipline particularly satisfying. Presidents find the reception of information satisfying to a greater extent than the reception of instruction. Staff members, perhaps as a reflection of their role, reported giving information and instruction as more satisfying than receiving information and instruction. Again, perhaps as a reflection of the student role, students reported receiving instruction as being most satisfying to them.

Summary

Chapter IV was concerned with the analysis of the data. The

hypotheses were stated and tested and the related hypotheses were then stated and tested. The President Questionnaire, the Staff Questionnaire, and the Student Questionnaire were analysed, including a factor analysis of each and correlations between factors and communication satisfaction scores. The Communication Record Form was analysed to determine frequencies and preferences for certain communication patterns.

Chapter V contains a summary of the study, followed by conclusions and implications arising from the study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

I. SUMMARY

The Problem

The problem basic to the study was the determination of the relationship between role satisfaction and communication satisfaction as perceived by presidents, staff, and students in post-secondary institutions in Alberta. The problem naturally generated sub-problems concerned with relationships between role satisfaction of groups of presidents, staff, and students and their satisfaction with communications with other particular groups. Factor analyses of the questionnaires identified factors that contribute to role satisfaction and these factor scores were correlated with communication satisfaction scores. A further sub-problem was the identification of frequencies and preferences of communication patterns; an analysis of the Communication Record Form identified these frequencies and preferences.

Theoretical Bases for the Research

All organizations, both formal and informal, exist through the role behavior of the individuals within the organization. The individuals concerned feel a degree of satisfaction with the roles they are expected to and expect to fulfill. The same individual that fulfills a role in an organization is also a part of the communication systems of that organization and it was considered possible that

incumbents feel a degree of satisfaction with the communications in which they participate in the organization, as well as role satisfaction.

The theoretical bases for the study were discussed in the review of literature pertaining to role theory and communication theory. Although there is no comprehensive theory of role, it is accepted by researchers that roles do exist and are a source of satisfaction or dissatisfaction to the incumbent, depending upon his expectations and prepotency of needs dispositions.

Similarly, there is no comprehensive theory of communication, but it is accepted that communications do exist in organizations and are a source of satisfaction or dissatisfaction.

Hypotheses

The hypotheses derived from the problems and sub-problems, and were: (1) a significant positive correlation exists between the role satisfaction and communication satisfaction of individuals in post-secondary institutions; (2) a significant positive correlation exists between the role satisfaction and communication satisfaction of the presidents of post-secondary institutions; (3) a significant positive correlation exists between the role satisfaction and communication satisfaction of the staff members of post-secondary institutions; (4) a significant positive correlation exists between the role satisfaction and communication satisfaction of students in the post-secondary institution.

The related hypotheses suggested a significant positive correlation between the groups of presidents, staff members, and students, and their satisfaction with communications with groups of presidents, staff members, students, and outside agencies or individuals.

Methodology and Instrumentation

Six post-secondary institutions were selected from within the province of Alberta; two institutes of technology, two agricultural-vocational colleges, and two junior colleges. In each institution, the president, ten staff members, and twenty students were asked to respond to a questionnaire, which was designed to assess role satisfaction, and to record twenty communications on the Communication Record Form, which was designed to assess communication frequencies, patterns, and satisfaction.

Data provided by the respondents to the instruments were analysed using correlation coefficients, factor analyses, and frequencies and preferences for certain communication patterns, in order to test the hypotheses and the related hypotheses.

II. FINDINGS AND CONCLUSIONS

Testing the Hypotheses

The correlation between the data from all questionnaires and the satisfaction with communications from all Communication Record Forms was found to be positive and significant. The research hypothesis was accepted in the testing of Hypothesis One.

Similarly, the data from the President Questionnaire were correlated with the data from the presidents' Communication Record Forms, data from the Staff Questionnaire were correlated with the data from the staff Communication Record Forms, and data from the Student Questionnaire were correlated with the data from the student's Communication Record Forms. In each case the correlation coefficient that was calculated was found to be positive and significant and in each case the research hypothesis was accepted in the testing of Hypotheses Two, Three, and Four.

Testing related hypotheses. The related hypotheses were tested by correlating the data from the questionnaires submitted by groups of presidents, staff members, and students with the data derived from the Communication Record Forms of each group when participating in a communication with a member or members of the groups of presidents, staff members, students, or community. Positive and significant correlation coefficients were calculated between the role satisfaction of the president and his satisfaction with communications with staff members, students, and outside agencies and individuals. Positive and significant correlation coefficients were found between the role satisfaction of staff members and satisfaction with communications with the president, other staff members, and students, but a significant positive correlation was not found with members of the community. A positive and significant correlation coefficient was found between the role satisfaction of students and their satisfaction with communications with other students, but not with presidents, staff members, or with members of the community. The

significant positive correlations were accepted in each case; all correlations were positive but those that did not show significance led to the rejection of the research hypotheses.

Analyses of the Questionnaires

The questionnaires were factor analysed in order to identify factors related to role satisfaction. Scores on factors were then correlated with scores from the Communication Record Forms. That is, factor scores from the questionnaires of presidents, staff, and students were correlated with communication satisfaction scores of presidents, staff, and students.

The factor analysis of the Staff Questionnaire (which was also used for the President Questionnaire since the number of participating presidents was only five) identified the following factors: (a) opportunity for advancement; (b) salary and other benefits; (c) organization and administration; (d) supervision; and, (e) coworkers. The only significant and positive correlations that were calculated were between the president's satisfaction with communications and his satisfaction with salary and other benefits, and coworkers.

The same factors were used in calculating factor scores of staff members and correlating these scores with staff satisfaction with communication. Positive and significant correlation coefficients were calculated between staff satisfaction with communications and staff satisfaction with the factors concerning organization and administration, supervision, and coworkers.

The factor analysis of the Student Questionnaire identified the following factors: (a) organization and administration; (b) salary and other benefits; (c) supervision; (d) content of work; (e) coworkers; and, (f) conditions of work. Each of these factors yielded a positive and significant correlation with students' satisfaction with communications.

Analyses of the Communication Record Form

Presidents, staff members, and students from the post-secondary institutions that participated in the study returned 137 completed questionnaires and 2183 Communication Record Forms (approximately sixteen forms per respondent) containing 16299 pieces of information. The data from these forms were analysed for frequencies and percentages of types of communications and for preferred communications. The results indicated that, for all groups, the most frequent and most preferred communications were oral, individual, informal, and self-initiated. The satisfaction shown for communications was a relative satisfaction within the groups for different types of communications.

Conclusions

Several conclusions may be drawn from this study. The hypotheses from the basic problem were that there is a relationship between role satisfaction and communication satisfaction. The results showed that there is a strong positive relationship between these two variables. Perhaps the importance of communication satisfaction has not been sufficiently emphasized in organizational studies, since it is rarely mentioned in the literature devoted to role and job

satisfaction.

The results indicate that presidents' role satisfaction is related to communication satisfaction with all groups within the college and with agencies and individuals outside the college. The conclusion may be drawn that the successful president is aware of the influence of all groups and that he is the liaison person between and among groups.

The role satisfaction of staff members was found to be significantly correlated with communications with others within the college but not with agencies and individuals outside the college. The staff of the post-secondary institution may be more concerned with their roles as they are defined by referent groups within the college than with any influence that may be brought to bear by those outside the college.

Students, according to the data, appeared to be concerned only with other students as influencing their role satisfaction and that communications with the president, with the staff, and with the community has a non-significant effect. A significant correlation might have been anticipated between student role satisfaction and student satisfaction with communications with staff members since much of the student's time is spent in the class- or seminar room. However, the data did not indicate that interactions with staff members related to the role satisfaction of students.

The correlation coefficients calculated between factors of

role satisfaction identified in the factor analyses, and satisfaction with communication lead to the conclusion that satisfaction with communications is primarily concerned with factors of a human relations nature such as supervision, administration, and coworkers. This conclusion may have been expected since communications are essentially oriented to human interactions.

The analyses of the Communication Record Form lead to the conclusions that: individual contacts are preferred to group contacts; oral contacts are preferred to written contacts; self-initiated communications are preferred to other-initiated communications, and that, informal contacts are preferred to formal contacts. These conclusions apply to presidents, staff members, and students in the post-secondary institutions that participated in the study.

III. IMPLICATIONS FOR EDUCATIONAL ADMINISTRATION

The positive and significant correlation coefficients that were calculated between role satisfaction and communication satisfaction of presidents, staff members, and students in the post-secondary institutions studied may have important implications for educational administrators. The findings of the present study revealed that a strong relationship exists between the role satisfaction and communication satisfaction of presidents, staff members and students. The administrator's awareness of these relationships may cause him to place a high priority on the planning of communication networks in his college.

The data indicated that the president's role satisfaction is related to his satisfaction with communications with groups inside and outside his college. An implication of this relationship for the president may be an examination of his communications with all groups and an examination of his role while interacting with these groups. Similarly, the administrator may wish to examine and evaluate the interactions among staff and students for indicators of role satisfaction and communication satisfaction.

A causal relationship does not necessarily exist in correlational statistics, but the relationship itself may imply worthwhile considerations. There may be an infinite number of variables affecting the role satisfaction of an individual (such as hours of sleep, domestic happiness, recognition, size of desk, and so on) which can, and perhaps should, be measured in further research studies. The present study did not presume to preclude the existence and importance of other factors that may impinge upon role satisfaction and communication satisfaction.

Satisfaction with coworkers was found to be the common factor of significance when correlated with communication satisfaction at all levels in the post-secondary institution. Sergiovanni, replicating Herzberg's work, suggested that effective administrative behavior should concentrate on: "interpersonal relationships, effective communications, and group effectiveness." The present study bears out Sergiovanni's suggestion that interpersonal relationships should be considered by the administrator in his efforts toward an effective college.

IV. IMPLICATIONS FOR FURTHER RESEARCH

The present research focussed on the relationship between satisfaction with role and satisfaction with communications. The instruments used were developed specifically for use in post-secondary institutions. Further research with modifications of the instruments could be used in educational organizations at other levels. Extensive research may give some insights into other factors that cause satisfaction to those involved in education and perhaps reveal factors that cause motivation of staff members and students.

The Communication Record Form was found to be a convenient way of collecting data on frequencies of communications, preferences for certain communications, and satisfaction with communications with groups within and outside the post-secondary institution. Further research with modifications of the Communication Record Form would be useful in other educational organizations in analysing communication patterns and possible barriers to effective communications. A detailed analysis of the Communication Record Form may suggest areas and means of communications that, if emphasized, would lead to more effective communications.

V. CONCLUDING STATEMENT

The role satisfaction of a member of an organization may be favorably, or unfavorably, affected by any of the components that constitute his role in the organization. His perception of his role is partly influenced by his own expectations and the expectations of referent groups. His needs dispositions are unique to him, as is his

concept of the fairness of his returns from the organization. The incumbent alone can assess the degree to which he finds satisfaction in his role. The questionnaires used in this study relied upon the individual's own assessment of his satisfaction with various component factors in his role. Communications form an integral part of the performance of a role. This study illustrated the relationship between role satisfaction and communication satisfaction in the post-secondary institutions. A realization of the importance of this relationship can only result in better communications among all levels in an organization with the resultant positive effect upon role satisfaction.

BIBLIOGRAPHY

A. BOOKS

- Biddle, B. and E. Thomas (eds.) Role Theory: Concepts and Research. New York: John Wiley, 1966.
- Campbell, R., J. Corbally and J. Ramseyer, Introduction to Educational Administration. Boston: Allyn and Bacon, 1962.
- Campbell, R. and R. Gregg, Administrative Behavior in Education. New York: Harper and Row, 1957.
- Ferguson, G., Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1959.
- Getzels, J., J. Lipham and R. Campbell, Educational Administration as a Social Process. New York: Harper and Row, 1968.
- Gross, N., W. Mason and A. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role. New York: John Wiley, 1958.
- Harman, H., Modern Factor Analysis. Chicago: University of Chicago Press, 1960.
- Herzberg, F., B. Mausner and B. Snyderman, The Motivation to Work. New York: John Wiley, 1959.
- Katz, D. and R. Kahn, The Social Psychology of Organizations. New York: John Wiley, 1967.
- LeBreton, R., Administrative Intelligence-Information Systems. Boston: Houghton-Mifflin, 1969.
- Likert, R., New Patterns of Management. New York: McGraw-Hill, 1967.
- Litterer, J., The Analysis of Organizations. New York: John Wiley, 1966.
- Maier, N., Psychology in Industry. Boston: Houghton-Mifflin, 1965.
- March, J. and H. Simon, Organizations. New York: John Wiley, 1958.
- Maslow, A., Motivation and Personality. New York: Harper, 1954.

- McCloskey, G., Education and Public Understanding. New York: Harper, 1959.
- McGrath, J., Social Psychology. New York: Holt, Rinehart and Winston, 1964.
- Morse, N., Satisfactions in the White-Collar Job. Ann Arbor, Michigan: University of Michigan, 1953.
- Porter, L., and E. Lawler, Managerial Attitudes and Performance. Homewood, Illinois: Irwin, 1968.
- Reeves, A., H. Melsness and J. Cheal, Educational Administration: The Role of the Teacher. Toronto: MacMillan, 1962.
- Smith, A., Communication and Culture. New York: Holt, Rinehart and Winston, 1966.
- Thayer, L., Administrative Communication. Homewood, Illinois, Irwin, 1961.
- Thayer, L., Communication and Communication Systems. Homewood, Illinois: Irwin, 1968.
- Zaleznik, A., C. Christenson and F. Roethlisberger, The Motivation, Productivity and Satisfaction of Workers. Boston: Harvard University, 1958.

B. ORGANIZATIONS

- Foskett, J., Role Consensus: The Case of the Elementary School Teacher. C.A.S.E.A., Eugene, Oregon, 1969.
- Ingram, E., "The Principal and Public Relations," Alberta School Principals' Leadership Course, Edmonton, Alberta, 1963.
- MacKay, D., "The Principalship: A Pivotal Role in Communication," Alberta School Principals' Leadership Course, Edmonton, Alberta, 1963.
- Yuzuk, R., "The Assessment of Employee Morale," Bureau of Business Research, Ohio State University, Columbus, Ohio.

C. PERIODICALS

- Bauer, R., "Communication as a Transaction; A Comment on 'The Concept of Influence,'" Public Opinion Quarterly. Vol. 27, 1963.
- Bavelas, A., and D. Barrett, "An Experimental Approach to Organizational Communications," Personnel. Vol. 27, 1951.
- Chase, F., "How to Meet Teachers' Expectations of Leadership," Administrators' Notebook. Vol. I, No. 9, 1954.
- Getzels, J. and E. Guba, "Social Behavior and the Administrative Process," The School Review. Vol. 67, 1957.
- Lawler, E., L. Porter and A. Tennenbaum, "Managers' Attitudes Toward Interaction Episodes," Journal of Applied Psychology. Vol. 52, No. 6, 1968.
- Levinson, D., "Role, Personality and Social Structure in the Organizational Setting," Journal of Abnormal Psychology. Vol. 58, 1959.
- Miklos, E., "Role Theory in Administration," The Canadian Administrator. Vol. 3, No. 2, 1963.
- Parsons, T., "On the Concept of Influence," Public Opinion Quarterly. Vol. 27, 1963.
- Ronan, W., "Individual and Situational Variables Relating to Job Satisfaction," Journal of Applied Psychology. Vol. 54, No. 1, Part 2, 1970.

D. ARTICLES IN COLLECTION

- Bakke, E., "Concept of the Social Organization," in M. Haire (ed.) Modern Organization Theory: A Symposium of the Foundation for Research on Human Behavior. New York: John Wiley, 1959.
- Dubin, R., "Stability of Human Organizations," in M. Haire (ed.) Modern Organization Theory. New York: John Wiley, 1959.
- Jackson, J., "Structural Characteristics of Norms," in B. Biddle and E. Thomas (eds.) Role Theory: Concepts and Research. New York: John Wiley, 1966.
- Mitchell, M., "Over-, Under-, and Mis-Communication in Our Society," in L. Thayer (ed.) Communication. New York: MacMillan, 1970.

Newman, J., "A Rationale for a Definition of Communication," in A. Smith (ed.) Communication and Culture. New York: Holt, Rinehart and Winston, 1966.

Ross, J. and A. Zander, "Need Satisfaction and Employee Turnover," in M. Wadia (ed.) Management and the Behavioral Sciences. Boston: Allyn and Bacon, 1969.

Sarbin, T., "Role Theory," in G. Lindzey (ed.) Handbook of Social Psychology. Cambridge: Addison-Wesley, 1954.

E. UNPUBLISHED MATERIALS

Benevento, P., Administrative Communication: A Study of its Relationship to Administrative Leadership. Unpublished Doctoral Dissertation, Syracuse University, 1956.

Wallen, J., The Interpersonal Gap. Unpublished paper for The Northwest Educational Laboratory, 1968.

APPENDIX A

COMMUNICATION RECORD FORM

Please check all items that apply to this communication in each section.

I.D. Number _____

1. Type of Contact:

Letter or Memo _____
 Group Contact _____
 Individual Contact _____
 Telephone _____
 Oral _____
 Written _____
 Other (specify) _____

2. Position of Other Person(s):

President/Principal _____
 Staff _____
 Student _____
 Other (specify) _____

3. Contact Initiated by:

Self _____ Other _____

4. Type of Activity:

Administration _____
 Instruction _____
 Discipline _____
 Public Relations _____
 Curriculum _____
 Other (specify) _____

5. Purpose of Episode:

Giving Information _____
 Receiving Information _____
 Giving Instruction _____
 Receiving Instruction _____

6. The Communication Episode Was--:

(Please circle one digit in each row)

Valuable	7	6	5	4	3	2	1	Worthless
Satisfying	7	6	5	4	3	2	1	Dissatisfying
Interesting	7	6	5	4	3	2	1	Uninteresting
Ineffective	1	2	3	4	5	6	7	Effective
Vague	1	2	3	4	5	6	7	Precise
Timely	7	6	5	4	3	2	1	Untimely
Inefficient	1	2	3	4	5	6	7	Efficient
Agreeable	7	6	5	4	3	2	1	Disagreeable
Unhelpful	1	2	3	4	5	6	7	Helpful
Necessary	7	6	5	4	3	2	1	Unnecessary

7. The Communication Episode Was--:

Formal (e.g. official, planned, directive, non-social, etc.) _____

OR

Informal (e.g. casual, spontaneous, familiar, social, etc.) _____

APPENDIX B

PRESIDENT/PRINCIPAL QUESTIONNAIRE

I.D. Number _____

Please circle the appropriate digit in each item that best expresses your feeling about that item.

1. To what extent are you satisfied with your present duties as a faculty member?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
2. To what extent are you satisfied with your opportunities for advancement to a higher position?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
3. To what extent are you satisfied that your remuneration is commensurate with your experience and qualifications?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
4. To what extent are you satisfied with your present position?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
5. To what extent are you satisfied with your present status as a faculty member?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
6. To what extent are you satisfied with the supervision of students in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
7. To what extent are you satisfied with the general organization in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
8. To what extent are you satisfied with your social relationships with staff members in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
9. To what extent are you satisfied with the working facilities in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
10. To what extent are you satisfied with your career opportunities?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
11. To what extent are you satisfied with the employee benefits other than salary that are attached to your position?
Satisfied 7 6 5 4 3 2 1 Dissatisfied

President/Principal (continued)

12. To what extent are you satisfied with the general policies of this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
13. To what extent are you satisfied with the academic leadership given by your faculty?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
14. To what extent are you satisfied with your professional association with your staff members?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
15. To what extent are you satisfied that the amount of work you are expected to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
16. To what extent are you satisfied with the professional growth in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
17. To what extent are you satisfied that your salary is reasonable for the amount of work you do?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
18. To what extent are you satisfied with the amount of guidance that you receive from supervisors?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
19. To what extent are you satisfied with the accessibility of subject specialists?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
20. To what extent are you satisfied with the cooperation that you receive from other staff members?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
21. To what extent are you satisfied that the number of hours of work you are required to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
22. To what extent are you satisfied that your communications with others are understood by them.
Satisfied 7 6 5 4 3 2 1 Dissatisfied
23. To what extent are you satisfied with the amount of communication in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
-

Thank you for your cooperation. Please use your I.D. number on all Communication Record Forms.

STAFF QUESTIONNAIRE

I.D. Number _____

Please circle the appropriate digit in each item that best expresses your feeling about that item.

1. To what extent are you satisfied with your present duties as a faculty member?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
2. To what extent are you satisfied with your opportunities for advancement in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
3. To what extent are you satisfied that your salary is commensurate with your qualifications and experience?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
4. To what extent are you satisfied with your present position?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
5. To what extent are you satisfied with your present status as a faculty member?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
6. To what extent are you satisfied with the policies related to supervision of students in this institution.
Satisfied 7 6 5 4 3 2 1 Dissatisfied
7. To what extent are you satisfied with the general organization of this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
8. To what extent are you satisfied with your social relationships with other staff members in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
9. To what extent are you satisfied with the working facilities in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
10. To what extent are you satisfied with your career opportunities?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
11. To what extent are you satisfied with the employee benefits other than salary that are attached to your position?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
12. To what extent are you satisfied with the general policies of this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied

Staff (continued)

13. To what extent are you satisfied with the academic leadership in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
14. To what extent are you satisfied with your professional association with other staff members?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
15. To what extent are you satisfied that the amount of work that you are expected to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
16. To what extent are you satisfied with your opportunities for professional growth?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
17. To what extent are you satisfied that your salary is reasonable for the work you do?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
18. To what extent are you satisfied with the guidance that you receive from supervisors?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
19. To what extent are you satisfied with the accessibility of subject specialists?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
20. To what extent are you satisfied with the cooperation that you receive from other staff members?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
21. To what extent are you satisfied that the number of hours of work you are required to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
22. To what extent are you satisfied that your communications with others are understood by them?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
23. To what extent are you satisfied with the amount of communication in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied

Thank you for you cooperation. Please use your I.D. number on all Communication Record Forms.

STUDENT QUESTIONNAIRE

I.D. Number _____

Please circle the appropriate digit in each item that best expresses your feeling about that item.

1. Please indicate the degree to which you are satisfied with the content of the courses that you are taking.
Satisfied 7 6 5 4 3 2 1 Dissatisfied
2. To what extent are you satisfied with the success that you achieve in your courses?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
3. To what extent are you satisfied with your financial position this year?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
4. To what extent are you satisfied with the general organization of this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
5. To what extent are you satisfied with your social relationships with other students?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
6. To what extent are you satisfied with the studying facilities in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
7. To what extent are you satisfied with the general supervision in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
8. To what extent are you satisfied with your present position as a student?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
9. To what extent are you satisfied with your present status as a student?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
10. To what extent are you satisfied that your courses will be of benefit to you?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
11. To what extent are you satisfied with the student privileges in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied

Student (continued)

12. To what extent are you satisfied with the general policies of this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
13. To what extent are you satisfied with your academic association with other students?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
14. To what extent are you satisfied that the amount of work that you are required to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
15. To what extent are you satisfied with the academic guidance in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
16. To what extent do you feel inclined to take further education as a result of this year's work?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
17. To what extent are you satisfied that you have reasonably sufficient funds for necessary purchases this year?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
18. To what extent are you satisfied with the personal guidance that you receive from supervisors and staff?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
19. To what extent are you satisfied with the accessibility of faculty members?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
20. To what extent are you satisfied with the cooperation that you receive from other students?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
21. To what extent are you satisfied that your communications with others are understood by them?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
22. To what extent are you satisfied that the number of hours of work that you are expected to do is reasonable?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
23. To what extent are you satisfied with the amount of general communication in this institution?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
-

Thank you for your cooperation. Please use your I.D. number on all Communication Record Forms.

APPENDIX C

The Communication Record Form

This form constitutes part of a study of communication patterns in the post-secondary institute. You are supplied with twenty forms and are asked to record any communication in which you participate during the next five days by entering check marks in the appropriate places on the form.

Please submit completed forms to the college office at the end of each day and make sure that each form bears your identification number as it appears on your Questionnaire.

The Questionnaire

This form constitutes part of a study of attitudes in the post-secondary institute.

You are requested to complete the form and submit it to the college office before the end of the week.

Please make sure that the identification number that appears on your Questionnaire is repeated exactly on each Communication Record Form.

Thank you for your time and cooperation.

APPENDIX D

THE PILOT STUDY

The questionnaires were developed for the presidents, staff members, and students considering the seven factors that were suggested by Ronan, Maier and Yuzuk as affecting role satisfaction: (a) content of work; (b) supervision; (c) organization and administration; (d) opportunity for advancement; (e) salary and other benefits; (f) coworkers; and, (g) working conditions. The decision was arbitrarily made to endeavor to construct three items purporting to represent each of the seven categories. Twenty-one items were designed which asked for responses from the subject on a seven-point Likert-type scale. In the use of the Likert-type scale, Herzberg's contention that individuals can put their own feelings on a continuum, was followed.

The questionnaires were tested during the pilot study with the help of graduate students (N=25) and undergraduate students (N=27) at the University of Alberta. These tests were made in order to establish the validity and reliability of the questionnaires.

All of the graduate students in the pilot sample had had experience in teaching or administration or both. One of the members of the pilot group was the president of a junior college. The pilot group of undergraduate students consisted of first-year students, some of whom had attended a post-secondary institution before entering

university.

Reliability

Stability. A test-retest technique was used to establish the stability of the instruments. All pilot subjects were asked to complete the graduate student or the undergraduate student questionnaire and to identify themselves in some manner. After two-weeks had elapsed, the same subjects were again asked to complete the form. Correlation coefficients were calculated between the first scores and the second scores. Correlations of stability of .92 for the graduate students and of .93 for the undergraduate students were found. The form was considered to be quite stable over the two-week time interval.

Internal consistency. The twenty-one items on each of the questionnaires were designed to represent the seven factors in seven sub-scales of three items each. In order to determine the internal consistencies of the items on the questionnaires, correlation coefficients were calculated between sub-scale items and other sub-scale items.

Table XXVIII shows the correlations that were calculated from the graduate student questionnaire.

Similarly, correlations were calculated between sub-scale item scores and other sub-scale item scores on the undergraduate student questionnaire. Table XXIX shows the correlations from this analysis.

The internal consistency of the questionnaires was also examined using the full sample of presidents, staff members and students during the research.

TABLE XXVIII
CORRELATIONS BETWEEN SUB-SCALE ITEMS
GRADUATE QUESTIONNAIRE

Factor	Items	r	Items	r	Items	r
Coworkers	8, 14	.874	8, 20	.724	14, 20	.844
Working conditions	9, 15	.454	9, 21	.409	15, 21	.856
Salary and benefits	3, 11	.581	3, 17	.915	11, 17	.572
Advancement	2, 4	.654	2, 10	.905	4, 10	.674
Supervision	6, 13	.552	6, 18	.420	13, 18	.385
Work content	1, 5	.373	1, 19	.353	5, 19	.126
Organization and administration	7, 12	.683	7, 16	.116	12, 16	.333

TABLE XXIX
CORRELATIONS BETWEEN SUB-SCALE ITEMS
UNDERGRADUATE QUESTIONNAIRE

Factor	Items	r	Items	r	Items	r
Working conditions	8, 11	.753	1, 8	.367	1, 11	.438
Salary and benefits	3, 9	.692	3, 17	.764	9, 17	.609
Organization and administration	2, 4	.506	2, 12	.536	4, 12	.616
Coworkers	5, 13	.490	5, 20	.382	13, 20	.383
Supervision	14, 15	.720	14, 18	.553	15, 18	.600
Work content	6, 19	.182	6, 21	.368	19, 21	.570
Advancement	7, 10	.230	7, 16	.066	10, 16	.242

Validity

Face validity. To determine the face validity of the questionnaires, that is, to determine if the items appear to elicit the information they purport to elicit, four graduate students and two faculty members were asked to give opinions on the graduate questionnaire and on the undergraduate questionnaire; four graduate students and two faculty members were asked for opinions on the undergraduate questionnaire, and four undergraduate students were asked to give opinions on the undergraduate questionnaire. The remarks and recommendations of these panels led to a few minor changes in the phraseology of some of the items as used on the final forms. Consensus was reached that all items in the questionnaires eduved role satisfaction.

Content validity. Content validity is similar to face validity determination in that a panel of judges may be used to express opinions on the content of the instrument. The same judges were requested to identify the seven factors of role satisfaction that the questionnaires purported to contain. The judges were provided with the factor titles, and each was able to identify the items that represented those factors.

Construct validity. An unsophisticated technique was used during the pilot study to determine whether the questionnaire actually measured role satisfaction. Six undergraduate students and four graduate students were asked to observe and converse with subjects who had responded to the questionnaires and form opinions as to their general satisfaction or dissatisfaction with their student roles. The

observations and findings of these judges were compared with the subjects' scores on the questionnaires. The mid-point of the full-scale was taken as the dividing line between satisfaction and dissatisfaction. In eighteen of twenty cases, the objective assessments of the judges agreed with the scores on subjects' questionnaires.

Factor analysis. The graduate questionnaire and the undergraduate questionnaire were both analysed during the pilot study. This analysis showed that five items could have been eliminated, and two factors discarded from each questionnaire. However, since the graduate and undergraduate students were not participating in the research, it was felt advisable to retain all items in the final questionnaires but to perform factor analyses on the scores of subjects from the full sample, and the, if deemed necessary, eliminate items from further calculations. This was done as reported in Chapter IV.

The factor analysis of the graduate student questionnaire revealed that there were certain factors in which items cluster together. Items with factor loadings below .500 could be eliminated and those factors with fewer than two items with loadings of at least .500 could be eliminated. On these bases, Items 5, 7, 12, 18, and 19 were deleted, as were the factors concerning work content and organization and administration. Table XXX shows the factors, the items that represent those factors, the factor loadings of the items, and the percentage of total variance after three rotations.

Similarly, the undergraduate student questionnaire was factor analysed and showed that certain items cluster under certain

TABLE XXX

FACTOR LOADINGS OF ITEMS

Graduate Questionnaire

Factor	Items	Loading	Percentage of Total Variance
Coworkers	8	.824	23.9
	14	.914	
	20	.943	
Working conditions	9	.691	18.2
	15	.856	
	21	.838	
Salary and Other Benefits	3	.871	15.7
	11	.723	
	17	.874	
Opportunity for Advancement	2	.599	14.6
	4	.743	
	10	.576	
Supervision	6	.853	9.0
	13	.691	
	18	.303	
Work content	1	.570	2 rotations
	5	.023	
	19	.418	
Organization and administration	7	.234	1 rotation
	12	.188	
	16	.798	

factors. Those items with factor loadings below .450 were eliminated as were the factors containing fewer than two items with factor loadings in excess of .450 in the cluster. On these bases, items 1, 6, 7, 19, and 20 were dropped as well as the factors concerning opportunity for advancement and work content. Table XXXI shows the factors, the items representing those factors, the loadings of the items and the percentage of total variance.

In the factor analysis program used, the original number of factors is reduced during successive rotations. In this case, the rotations reduced the number of factors from seven to three. Extensive use of electronic computers in factor analysis has led researchers to recommend that the number of factors accepted should be equal to the number of eigenvalues greater than one. Both the graduate questionnaire and the undergraduate questionnaire had five eigenvalues greater than one.

The item and factor analyses that were conducted on the questionnaires during the pilot study indicated that the items retained would be acceptable for the full sample and that each had five factors in which items cluster together.

TABLE XXXI

FACTOR LOADINGS OF ITEMS

Undergraduate Questionnaire

Factor	Items	Loadings	Percentage of Total Variance
Coworkers	5	.805	10.6
	13	.785	
	20	.221	
Working conditions	1	.307	22.3
	8	.618	
	11	.897	
Salary and Other benefits	3	.753	19.3
	9	.753	
	17	.808	
Organization and administration	2	.832	11.9
	4	.791	
	12	.675	
Supervision	14	.450	10.03
	15	.491	
	18	.820	
Work content	6	.735	2 rotations
	19	.241	
	21	.641	
Opportunity for advancement	7	.094	1 rotation
	10	.752	
	16	.636	

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